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March, 1898.





THE
CURABILITY OF INSANITY:

A SERIES OF STUDIES.

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BY

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"One principle may be sufficient to guide you,—that of standing rigorously
by the fact, however naked it look."—THOMAS CARLYLE.



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PREFACE.

It is now nearly ten years since my essay—"The Curability of Insanity," enlarged from the original in the annual report for the official year 1875-76 of the Northampton Lunatic Hospital—was read before the New England Psychological Society, and published, by direction of that association, in pamphlet form. Meanwhile, seven other articles upon the same subject have been embodied in my annual reports to the trustees of the aforesaid institution. Those papers have been favorably received by a large number of readers, both at home and abroad. (It is not presumptuous to claim that they have greatly modified the aspect of insanity, as a curable mental condition,) in the view of a large proportion of the persons most interested in the subject. They have thus been an important agent in stimulating the minds of philanthropists to seek—and in several notable instances to adopt—other methods for the custody and care of a large part of the insane than that of collecting them in expensive and unwieldy curative institutions. They have caused a very important change in the statistical methods of Massachusetts, in this

country, and Great Britain in Europe, whereby the reader is informed of the number of *persons*, as well as of *patients*, or *cases*, that recover. This more nearly perfect method will undoubtedly gradually find its way to other States and countries, until it becomes universal.

Under these circumstances, hoping that they may still be beneficial in the directions indicated, and by the expressed desire of some of the leaders in the great work of public charity and beneficence in this country, I have here brought those papers together, in a form convenient for preservation, perusal, and reference. The book, as a book, is simply what it is represented to be in its title,—“A series of Studies,”—each of them essentially, or to a great extent, independent of the others. It consequently follows that any criticism of it on the assumption, either expressed or implied, that it is, or that it professes to be, a well-digested, logically-constructed monograph, would be unjust, and hence worthy of deprecation.

Some of the repetition, which, in the original publication, was a necessary consequence of several discussions of one and the same subject, has here been avoided; and it is hoped that no more of it remains than is necessary effectively to impress upon the mind of the reader the points which are intended to be illustrated or enforced by it.

P. E.

August 28, 1886.

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THE CURABILITY OF INSANITY.

STUDY FIRST.

(WRITTEN IN 1876.)

CHAPTER I.

INTRODUCTORY.

WITHIN the last few years, calculations have been made, in more than one of the States, for the purpose of showing the pecuniary loss that has accrued to those States, respectively, from a failure to cure that portion of their dependent insane assumed to have been curable in the early stages of the disease. In Pennsylvania, the calculation was made by the Board of Public Charities, and is based upon the estimated number that became insane in the decennium from 1864 to 1873, inclusive. The author of it assumes, upon what he considers unquestionable authority, that seventy-five per cent. of them, if properly and seasonably treated, might have been permanently restored to health and usefulness. Had this been done, the total cost of treatment, together with the support, for life, of the twenty-five per cent. uncured, would, according to his estimate, have been

only \$6,540,066. On the contrary, had all these patients been placed in poor-houses, where it is assumed that seven per cent. of them would recover, the cost of support, during life, would have been \$11,271,932. "This," says the writer, "shows a clear saving of \$4,731,866." He then proceeds to show that, if the seventy-five per cent. had been cured, their earnings would have amounted to \$4,945,000 more than they would if only seven per cent. had been cured. Adding these sums he obtains a total of \$9,676,866, "a gain," he says, "of that much to the wealth and power of the community." Having completed the calculation, he says, "we urge a very careful attention to, and also criticism of the above demonstration."

But a few months have elapsed since, in an official report of the Commissioner of Insanity in Vermont, it was alleged, as a condemnatory fact against the hospital for the insane of that State, that the proportion of recoveries among the patients has recently been less than it was in the earlier history of that institution. In view of this allegation, and of the main proposition of the foregoing paragraph, it has appeared to me that a review of the subject of the curability of insanity might not be wholly useless at the present time.

The "demonstration," a criticism of which is invited by the Board of Public Charities of Pennsylvania, will not suffer, as an intellectual process, either in its logic or its mathematics, from the closest scrutiny. The serious question in regard to it is, are the elements of the calculation true? If either of them be false, the deduction from them cannot be otherwise than untrue. Although not directly so stated, it is evident that the seventy-five per cent. of assumed curables relates to

persons, and not to *cases*; that is, that the author of the "demonstration" believed, or appears to have believed, that three-fourths of all the men and women who become insane can be permanently cured. The truth of this assumption is necessary to the truth of the deduction at which he arrives.

The belief that mental disorders are thus largely curable is not entertained by the Board of Public Charities of Pennsylvania alone. It has become pretty widely prevalent among persons interested in the subject of insanity, but not, themselves, engaged in the treatment of the insane. Some of these persons entertain the opinion that even a still larger proportion are susceptible of cure. It is one of the objects of this paper to ascertain, if possible, whether this opinion is justified by the facts.

As an almost, if not entirely, universal rule, the superintendents of the institutions for the insane report the recoveries of *cases* rather than of *persons*. A *person* may be admitted more than once into a hospital, and hence make as many *cases* as the number of his admissions. As a *case* he may recover several times; and not only so, but, after several recoveries, he may still die insane. His history then furnishes to the statistics of insanity several recoveries of *cases* but not one permanent recovery of a *person*. Thus, at the State Hospital at Northampton, a man was discharged, recovered, seven times, and improved, once, in the course of nine years; and subsequently committed suicide at home. Another man has been discharged, recovered, six times, on the same number of admissions, in the course of fifteen years. One woman was discharged, recovered,

eight times on as many admissions, in the course of eleven years. Another, admitted six times in the course of nine years, was discharged recovered every time; and a third, admitted six times within a period of eight years, was likewise discharged, recovered, every time. These five *persons* have, as *cases*, recovered thirty-three times, and yet it is not probable that either of the *persons* has permanently recovered.

Every institution for the insane has its cases of this kind, and, as a rule, the older the institution the more it has of them, and the larger is the number of times that each of them has been discharged recovered. The most remarkable instance of the kind which has come to my knowledge occurred at the Bloomingdale Asylum, New York, where a woman was admitted fifty-nine times in the course of twenty-nine years, and was discharged, recovered, forty-six times.

Dr. Joshua H. Worthington, Superintendent of the Friends' Asylum at Frankford, Pennsylvania, informs me that eighty-seven *persons* have contributed two hundred and seventy-four recoveries to the statistics of that institution, an average of a fraction more than three to each person. One patient recovered fifteen times; another thirteen; a third nine; a fourth eight; and a fifth seven. Those statistics are indebted to those five persons for fifty-two recoveries, or an average of ten to each person. So, while the uninformed reader believes that fifty-two persons recovered, the truth of the matter is that no less than three of the persons died insane in the asylum, and consequently the permanent cures, if any, could not, at most, have been but *two*.

The report for the official year 1867-68, of the Re-

treat at Hartford, Connecticut, contains a table by which it is shown that, of the 4898 cases admitted, thitherto, into that institution, only 3062 were of first admission. In other words, there were but 3062 persons, 707 of whom were readmitted once or more, making a total of 1836 readmissions. Hence, of each hundred of patients received, thirty-seven (37.48) had been there before. One person was admitted thirteen times, and thirteen persons were admitted a total of one hundred and eight times. How many of those one hundred and eight times the thirteen persons were discharged recovered, the report does not inform us; but we may reasonably conclude that it was a large majority. Yet, which of those persons was really cured?

At the Pennsylvania Hospital for the Insane, of 7167 admissions recorded in the report for 1875, only 5186 were cases of first attack. No less than 1981 were of attacks subsequent to the first. One man was admitted on the twenty-second attack, and one woman on the thirty-third; six men and six women on the tenth attack; ninety-four persons on the fifth attack; and one hundred and seventy-two persons on the fourth. Dr. Kirkbride does not state the number of times that any of these had recovered; but if a person have a thirty-third *attack* of a disease, it necessarily follows that he had previously recovered from thirty-two attacks.

Dr. Barnard D. Eastman, of the State Hospital at Worcester, is now engaged in an analysis of the cases treated at that institution from the time of its origin. The work was begun upon the cases of females, about one-half of which have been passed under review. I am indebted to him for some of the results thus far attained.

Of 2949 admissions, 694 were readmissions. Hence, 2255 persons constituted 2949 patients. The readmissions were equal to nearly one-third (30.80 per cent.) of the persons.

Seven persons were admitted an aggregate of one hundred and six times, or an average of a fraction more than fifteen times each. One was admitted twenty-three times, one eighteen times, one sixteen, one fourteen, one thirteen, and two, eleven times each. One of the seven persons was discharged *recovered* twenty-two times, one sixteen times, one thirteen times, two eleven times each, one ten times, and one nine times. Consequently, the seven persons furnished ninety-two recoveries, or an average of a fraction more than thirteen recoveries to each person; and yet two of these persons died insane in the hospital, and a third is now an inmate of it, considered hopelessly insane. Thus, of the ninety-two recoveries presented to the readers of the Worcester reports, the *permanent recoveries of persons* were, at most, only *four*.^{*} Such is the chaff which, for a long period, the people of Massachusetts have been accustomed to regard as the kernel of the wheat. Very appropriately has Dr. Sheppard, of the Colney Hatch Asylum, England, remarked, "It is obviously one

^{*} Since the above was written, I have learned that, of these *four* persons, *one* was again readmitted at the Worcester Hospital, January 10, 1877. The *second*, since last at Worcester, has been discharged, improved, twice, from the Butler Hospital, at Providence, Rhode Island, and, during the last seven years, has been a constant inmate of that hospital, incurably insane. The *third* "died at home, years ago, mental state not known;" and the *fourth* "probably died at home, circumstances unknown."

thing to formulate error, and another to formulate truth." What further revelations may be made in the prosecution of Dr. Eastman's enterprise, time alone can show; but, even should there be none of noteworthy importance, he may be well satisfied with these, as a full reward for his labor.

These cases of multiple admission and recovery sometimes materially affect the proportion of apparent cures for the year, as represented by the annual reports, in consequence of a resort to the hospital several times within the year of one of those cases of periodical mania, the duration of the paroxysms of which are very brief.

Soon after I became connected with the Bloomingdale Asylum, in 1844, I learned that the woman who was the subject of the remarkable case above mentioned had been admitted and discharged, *recovered*, six times within the next preceding year. In the course of 1844 she was again received and discharged, *recovered*, six times. Following the example of my predecessor, I reported these recoveries in the tabulated statistics without any textual explanation.

In the next following year, 1845, the woman was admitted and discharged, *recovered*, *four* times. In the annual report for that year, *all* the cases of readmission were mentioned, and their results given separately. There were eleven readmissions and seven recoveries; and in the context it was stated that "four of the cures mentioned in this table were restorations from successive attacks, in a case of paroxysmal mania." This case subsequently led to the introduction of the question of the proper method of reporting periodical cases, as a subject for discussion at one of the meetings of the

Association of American Superintendents. After due consideration it was decided that no patient ought to be reported as recovered twice or more within one and the same year. It is evident, however, that this decision has not been universally, probably not generally, apparently not in a single instance, adopted as a rule of practice at the hospitals. As proof of this, in regard to one institution, we have the case of the woman who recovered twenty-two times at the Worcester Hospital, as shown by Dr. Eastman's statistics. *Four* of her recoveries took place in one year, *five* in the next following year, and *seven* in the third year. Worcester, therefore, takes the palm from the brow of Bloomingdale, for the largest number of recoveries by one person within the course of twelve successive months. In this case, the woman, within a period of twenty years and two months, recovered twenty-two times, and spent eleven years and one month in the hospital.

In all the foregoing instances, as in many others which might be gathered from hospital reports, the percentage of recoveries is very considerably increased by this duplication and multiplication of them in the same person; and yet, by the way in which they are generally published, the uninitiated reader has no reason even to suspect that the number of *persons recovered* is not equal to the *number of recoveries*.

Aside from the repeated admissions and recoveries of the same person, there is another influence which has an important effect upon the proportionate reported restoration of mental disorders. I allude to the special characteristics of the person reporting them,—his tem-

perament, his constitutional organization, his psychological individuality.

How often we find the people of a neighborhood differing in opinion in regard to a neighbor alleged to be insane! How frequently the superintendents of the hospitals are annoyed by persons holding this difference of opinion in regard to patients committed to their care, one party strongly asserting the existence of mental disorder, the other as strongly denying it! In the trial, before legal tribunals, of cases involving the question of the sanity or insanity of a prisoner or other person, it is not uncommon for even the most expert experts to differ in both opinion and testimony, taking opposite views of the mental condition in question. In a case like this, it is to be inferred that if, when that testimony is given, the person whose mental condition is in question were to be discharged from a hospital to which he had been committed when unquestionably insane, the experts upon one side would report him *recovered*, while those upon the other would record him as *not recovered*. The individuality mentioned has sometimes, though rarely, been recognized and acknowledged in the reports emanating from the institutions for the insane.

"It has come to be well understood among those familiar with vital statistics," says Dr. D. Tilden Brown, of the Bloomingdale Asylum, New York, in his report for 1867, "that they comprise an element not easily discovered among groups of figures, but which is, nevertheless, present as a leaven more or less potent. Borrowing a term from physiology, this element* may be

* Now called "the personal equation."

called the 'reflex action' of the observer's own temperament, and no just estimate of such statistics can be formed, until its value can be approximately determined."

For many years I have believed, and have often asserted that belief, that of a given number of patients discharged from a hospital for the insane, the number reported as recovered might differ at least twenty-five per cent., according to the man who might act as judge of their mental condition.

The medical history of the Worcester hospital, during the seven years next preceding the 1st of October, 1875, furnishes a remarkable illustration of the uncertainty of the statistics of insanity, as originating in the source under consideration.

From September 30, 1868, to October 1, 1875, there was no known agency operating upon the people from whom the patients of that hospital are drawn, which might either increase or diminish the prevalence of insanity, or so modify it as to render it less amenable to curative treatment. About the middle of the period a change of superintendents of the institution took place. Dr. Bemis resigned the office, and was succeeded by Dr. Eastman. This occurred within the official year 1871-72, so that each of those gentlemen occupied the office during a part of that year.

The last three *entire* official years of the administration of Dr. Bemis embraced the period from September 30, 1868, to October 1, 1871; and the first three of Dr. Eastman, the period from September 30, 1872, to October 1, 1875. The statistics of admissions and recoveries in the course of each of these

periods, as derived from the published reports, are as follows :

FIRST PERIOD.

OFFICIAL YEAR.	Admissions.	Recoveries.	Per cent. of Recoveries.
1868-69.....	337	149	44.21
1869-70.....	384	158	41.11
1870-71.....	470	209	44.46
Total.....	1191	516	43.32

SECOND PERIOD.

OFFICIAL YEAR.	Admissions.	Recoveries.	Per cent. of Recoveries.
1872-73.....	407	98	24.08
1873-74.....	400	71	17.75
1874-75.....	362	90	24.86
Total.....	1169	259	22.16

Thus, although the number of admissions (1169) in the second period was but twenty-two less than (1191) in the first, the number of recoveries (259) was but *one more than half as great*. The proportion of recoveries of the first period is to the proportion of recoveries of the second, as 195 to 100, or as 100 to 51.15. There is, in my opinion, but one explanation of this most surprising difference; and that is, the difference in the physical and mental constitution of the two men by whom these statistics were reported. Were it possible to apply to the two sets of cases a standard of sanity and an accurate measure of mentality, it would doubtless be found that there were as many recoveries in the second period as there were in the first. In the expression of this opinion I desire to be emphatic, as I

have too high a respect for both of the gentlemen concerned to do or say anything which might be tortured into the appearance of injustice toward either of them.

There are yet other modifying agents which have undoubtedly acted, to some extent, in the production of the statistics of insanity, as they have in so many other departments and directions of the enterprise of mankind. The medical officers of institutions for the insane can claim no exemption from the common weaknesses of human nature. They are men "with like passions as other men." Self-interest, in some instances, and ambition in perhaps all,—that ambition, at least, which is manifest in the desire to show as fair a record and as favorable results as are exhibited by colleagues in the specialty,—have probably not been wholly inoperative in the reporting of recoveries from insanity, even though unconsciously to the persons producing those reports. These influences have constituted, and, from the very nature of things, always must constitute, an element in the solution of the problem of the curability of mental disorders.

CHAPTER II.

HISTORY.—THE EXTREMISTS.

OF all the causes which have contributed to the production of the impression that insanity yields to curative treatment in a larger ratio than is now believed by physicians best acquainted with the subject and having

the largest practical experience, the most potent has been the frequently repeated assertions of their eminent curability, by the superintendents of hospitals, and by some other writers upon the subject. In proof of this proposition, it is proposed to present a cursory history of the subject during the last fifty or sixty years, with quotations of such evidence as the annals of the period may furnish.

In the year 1820, Dr. George Man Burrows, of London, England, published a small work entitled "An Inquiry into certain Errors relative to Insanity," one object of which was to demonstrate that mental disorders are more curable than was at that time generally supposed. He therein asserts that, of all the cases which had been treated by him, both in general practice and in his private asylum, "including patients in a state of fatuity, idiocy, and epilepsy, the proportion of recoveries was 81 in 100; of recent cases, 91 in 100; of old cases, 35 in 100." He admits that he had "been much favored by an unusually large proportion of recent cases;" and in his "Commentaries," published eight years afterwards, he acknowledges that his percentage of cures "appeared by some to be doubted."

Dr. Burrows had treated only 296 cases, not half so many as are to-day under the care of Dr. Godding, at Taunton. Of the 242 recent cases, 221 recovered, and of the 54 old cases, 19 recovered.

In the appendix to the "Inquiry," the doctor published the statistics of the recoveries at the Retreat, at York, from 1796 to 1819. These were furnished by Samuel Tuke, and were classified according to the duration of the mental disorder. They are as follows:

Cases.	Duration.	Attack.	Recovered.	Per Cent.
47	Less than three months.....	First	40	85.10
45	Three to twelve months.....	First	25	55.55
34	Under twelve months	Not the first.	21	61.76
48	Under two years	First	12	25.00
79	More than two years.....	.....	14	17.72

Hence are derived the further statistics that, of the 92 cases of first attack, and of less than one year in duration, the recoveries were 65, or a proportion of 70.65 per cent. Of *all* the cases (126) of less duration than one year, whether of first or subsequent attack, the recoveries (86) were equal to 68.25 per cent. The ratio of recoveries of the whole number treated was 44.26 per cent.

The next authority to which our attention is called is the annual report of the Retreat, at Hartford, Connecticut, for the official year 1826-27. The information contained in that report "fell upon dry and stony ground," and doubtless would have there remained, fruitless and comparatively unknown, had it not been gathered and disseminated by a travelling foreigner. Captain Basil Hall, of the Royal Navy of Great Britain, visited the Retreat on the 25th of October, 1827, and gave an account of that visit in the history of his American tour, which was subsequently published.*

"Dr. Todd," says the captain (vol. ii. p. 192), "the eminent and kind physician in charge of the Retreat, gladly communicated his plans, and showed us over

* "Travels in North America, in the years 1827 and 1828," by Captain Basil Hall, Royal Navy. In three volumes. Edinburgh, 1829.

every part of this noble establishment,—a model, I venture to say, from which any country might take instruction.” Upon subsequent pages he copies “extracts from the report of the visiting physicians,” one of which is as follows :

“During the last year there have been admitted twenty-three recent cases, of which twenty-one recovered, a number equivalent to 91.3 per cent. The whole number of recent cases in the institution during the year was twenty-eight, of which twenty-five have recovered, equal to 89.2 per cent.”*

Thus recognized and endorsed, not merely *in* Great Britain, but by a representative of that arm of her power in which has hitherto rested her confidence, as the source of her greatest pride and glory, the “report of the visiting physicians” suddenly became worthy of recognition upon this side of the Atlantic. The newspapers took it up and sent it through the length and the breadth of the land ; and in this way, whatever a few physicians and others might have previously learned from the report itself, the people at large received their first impression that insanity is largely curable. By a few strokes of his magic pen Captain Hall did what, were it not for him, would have required the labor of years.

Very soon after the appearance of this book in the United States, and while the memory of the Hartford statistics was still fresh and vivid, Massachusetts caused to be erected her first State hospital for the insane, at Worcester. It was opened in January, 1833. Dr.

* Vol. ii. page 196.

Samuel B. Woodward, its first superintendent, came directly from the atmosphere of the Hartford Retreat. That institution was in part indebted to him for its existence. He was one of the few who took the initiatory measures for its foundation; he was one of the original directors to whom its charter was granted; and its welfare had always been to him an object of interest and solicitude.

Dr. Woodward's intellectual abilities were considerably above the average. He was cheerful and sanguine, and much interested in his specialty, which he consequently pursued with enthusiasm and entire dedication of time and thought and feeling. Both his physical temperament and his intellectual constitution were such as not only to induce, but perhaps to force him to "look upon the bright side of things," whatever might call for his opinion or action.

A man so constituted, having such antecedents and the reported success at Hartford as an example, would not be likely to present the subject of insanity, as it appeared at Worcester, in a less cheerful light than nature and truth would justify. In his second annual report, which embraced the official year terminating with the 30th of September, 1834, he wrote as follows, in his summary of the statistics of the year: "Recovered, of all the recent cases discharged, eighty-two and one-quarter per cent." The reader will please observe that this high percentage represents the ratio of recoveries to cases *discharged*, and *not* to cases *admitted*. It is believed that a non-observance of this fact, by the casual or the careless reader, was one cause of the erroneous impression conveyed to the public mind.

In his third report the doctor says, "Recoveries of those patients during the year ending November 30, 1835, whose insanity was less than one year's duration, eighty-two and one-half per cent.;" and, upon another page, "In recent cases of insanity, under judicious treatment, as large a proportion of recoveries will take place as from any other acute disease of equal severity." It is believed that this was the first public annunciation, in America, of the principal idea of the proposition contained in the quotation,—namely, the curability of insanity as compared with other severe acute diseases.

In the fourth report, for 1836, he says, "Per cent. of recoveries of recent cases discharged, eighty-four and one-fifth;" and in the fifth, for 1837, "Per cent. (of recoveries) of recent cases discharged of less than one year's duration, eighty-nine and one-fifth."

Whatever erroneous idea may have, thus far, been inadvertently and unintentionally produced by the method of computing the proportion of recoveries upon the number *discharged*, it *ought* to have been corrected by the subjoined extract from the report for 1838, in which the language would imply that it is computed upon the number *admitted*:

"There have been admitted, since the hospital was opened, three hundred and thirty-four cases of less duration than one year; of which, two hundred and seventy-six have recovered, which is about eighty-two and two-thirds per cent.

"In most institutions, it is customary to deduct those that have not had sufficient time; this may be said of the twenty-eight recent cases left in the hospital at the

end of the year; these deducted, the per cent. of recoveries will be *ninety and one-half*.

"If we make a further deduction of the deaths of the cases from this class, which is also the rule in many institutions, we should increase the per cent. to about ninety-four."

Although apparently avoiding the erroneous method of computation before mentioned, this extract well illustrates the prevalent desire of the time at which it was written to produce enormous percentages of recoveries. That both reason and common sense were sacrificed to that desire, is sufficiently proved by not this quotation alone, but by others, from other sources, yet to be produced. In the second paragraph of the above extract, the reader is asked to reject all cases remaining in the hospital, although unquestionably a considerable part of them were incurable; and, as if this were not enough, he is then, in the third paragraph, invited to set aside all who have died!

If, in calculating the curability of mental disorders, all cases of mortality are to be rejected, why not in all other diseases? The principle appears as reasonably applicable in pneumonia or typhoid fever as in insanity, but it is a principle better adapted to the consolation of the physician than to the discovery of truth in science. Let it be applied, for example, to consumption and Asiatic cholera: calculate the percentage of recoveries accordingly, and behold what harmless diseases they immediately become!

In the seventh report of the hospital at Worcester, the proportion of recoveries, for the year, of recent cases discharged, was asserted to be 90 per cent.; in the

eighth, sixty-four patients of seventy, equal to 91.42 per cent.; and in the ninth, 91 per cent. This was in the latter part of the year 1841. "The average of recoveries of cases of less duration than one year," says this report, "is now 88 per cent. for the whole time (nine years), and is as great as can be expected."

When Dr. Woodward took charge of the hospital at Worcester, there were but eight other institutions, specially devoted to the care and custody of the insane, in the United States. Four of them were incorporated, and only three—in Virginia, South Carolina, and Kentucky—belonged to the States, respectively, within which they are situated. Of a majority, at least, of the eight, the chief medical officer was merely a visiting physician engaged in general practice. Annual reports were published by but a part of them; and such as were published were brief, and their circulation very limited. Thus circumstanced, there was a golden opportunity for the doctor to disseminate among the people some knowledge of insanity and its treatment in hospitals, and thus give an impetus to the thitherto languid and lagging enterprise for the amelioration of the condition of the insane upon this side of the Atlantic. This opportunity he did not fail to seize. His very elaborate reports, abounding in statistics, as well as in other matter more attractive to the general reader, were widely circulated, and he soon became known, not only throughout the States, but likewise in Europe, and was generally regarded as the highest living American authority in the treatment of mental disorders. In the course of the ten years next following his removal to Worcester, no less than twelve hospitals for the insane

were founded and opened within the States, and seven of them were State institutions. The superintendents of some of these were men of no less ability than Dr. Woodward, and they entered heartily into the prosecution of their work. Some of the older institutions, meanwhile, had become newly and ably officered. Dr. Bell had taken charge of the McLean Asylum, and Dr. Brigham of the Hartford Retreat. A spirit of emulation was aroused, which, at length, by stimulation, became what might more properly be termed rivalry, albeit the generous rivalry of friends, and conducted, as a whole, in the love of science and under the promptings of benevolence.

We are now approaching the maximum mathematical curability of insanity. The next foregoing paragraph is considered important, as showing some of the causes which led to it. In 1840, the Worcester Hospital had attained, as shown above, a proportion of 91.42 per cent., and in 1841, 91 per cent. The percentage of Dr. Burrows, as has been seen, was 91.

In the report of the Eastern Asylum for the Insane, in Williamsburg, Virginia, for the year 1842, Dr. John M. Galt, the superintendent at the time, quoted the percentages of recent cases claimed to have been cured by Sir William Ellis,* Dr. Burrows, Dr. Woodward, and, on the authority of Basil Hall, the Retreat at Hartford. He then gave a statistical account of thirteen cases of

* In his treatise on insanity, published in 1838, Dr. Ellis does not discuss the subject of curability. Probably this claim, "about ninety per cent.," was made in a report of either the Wakefield or the Hanwell Asylum, with both of which he was, at different times, connected.

recent insanity received at the institution under his charge, in the course of the year from July, 1841, to July, 1842. Six months after the expiration of that year, twelve of them, equal to 92.3 per cent., had recovered, and one had died. The doctor describes this single case of mortality, and then, adopting that admirable principle of exclusion, the precedent for which, in this country at least, had been established by Dr. Woodward, says, "If we deduct this case from those under treatment, the recoveries will amount to 100 per cent.!" "From such facts as the above," he continues, "I am led to believe that there is no insane institution, either on the Continent of Europe, in Great Britain, or in America, in which such success is met with as in our own."

The considerate reader will forbear to arraign the doctor for a deficiency of modesty. He had excelled his colleagues in the work of benevolence, and who but he could make it known? He had produced the thitherto maximum of percentage figures, including deaths; nay, more, had he not, under a recognized principle, mathematically demonstrated the curability of one hundred per cent., that is, *all* of the insane? Lest the living may not reply to this interrogation, I call upon the dead. What says Dr. Bell, of the McLean Asylum, thereupon,—Dr. Luther V. Bell, than whom, in the United States of America, no abler man, intellectually, and no more conscientious man, morally, has ever been engaged in the specialty of psychology?

"The records of this (McLean) Asylum," says he, in his report for the year 1840, "justify the declaration that *all cases, certainly recent*,—that is, whose origin does not, either directly or obscurely, run back more

than a year,—recover under a fair trial. This is the general law; the occasional instances to the contrary are the exception.”

These things sound so very strange at the present day, that, in order to reassure the reader, it would appear proper to inform him that no instance is recollected, and none, at the time of the present writing, has been discovered in the books, in which the claim to have cured more than one hundred per cent., or even that more than one hundred per cent. are curable, has been advanced. Logically, perhaps, claims of that nature might have been made; because the foregoing extracts from Galt, Bell, and Woodward were written more than thirty years ago, and some of the writers of the present day apparently believe that great improvements have been made in the treatment of insanity since that time.

Although the spring-tide of mathematical curability had now apparently attained its highest point, and Dr. Galt was upon the crest of its topmost wave,—with Dr. Bell beside him in opinative curability, for Dr. Bell entertained an inveterate dislike of the Arabic numerals as applied to insanity,—yet a further change was in reservation in the undeveloped but still immediate future. In only one short year after the recounted success at Williamsburg, Dr. Awl—there was a prophecy even in the sound of his name—in his report, for 1843, of the State Hospital for the Insane at Columbus, Ohio, thus unpretentiously but pithily announced his achievement for the year:

“Per cent. of recoveries on all recent cases discharged the present year, 100.” And so the goal was won; the

summit of the maximum wave of the highest possible high-water point was gained! Dr. Awl, who had "studied at the feet of Gamaliel" (Dr. Woodward), and who was always his loyal disciple, had outrivalled, not his master alone, but all other competitors.

But Dr. Woodward, in his report for the same year (1843), wrote as follows:

"I think it not too much to assume that insanity, unconnected with such complications (epilepsy, paralysis, or general prostration of health), is *more** curable than any other disease of equal severity; more likely to be cured than intermittent fever, pneumonia, or rheumatism."

Dr. Bell's report for the same year contains a general review of all the cases, "somewhat exceeding a thousand," which he had treated during his connection with the McLean Asylum, in which he says, "The best judgment I can form is, that six out of every ten discharged, including those considered unfit, those discharged with incomplete trial, and those dying prior to the event being determined, have recovered." Of those cases the duration of which was less than six months at the time of admission, he says, "Certainly nine-tenths have recovered."

After the Ohio triumph of 1843, there were indications, in some quarters, of an ebbing of the tide. Dr. Woodward, indeed, in his report for 1844, reported the recoveries of recent cases, at Worcester, at 93 per cent., and thus excelled his former self; but in that for 1845, his thirteenth and last, this percentage receded to 89.50. Dr. Chandler succeeded Dr. Woodward, and in his re-

*Not italicized in the original.

port for 1846 the retrograde movement was still greater than in the next preceding year, the proportion of recoveries of recent cases being but 79 per cent. This recession, however, was subsequently in part recovered from, and during the ten years' administration of Dr. Chandler the average was 83 per cent., whereas during the whole period of Dr. Woodward's administration it was 88 per cent.

Even Dr. Awl never again equalled himself. The prophecy was never fulfilled but once. In 1844 his percentage of recoveries of recent cases discharged receded to 89.47; but in 1845 it mounted to 95.12, and in 1846 to 95.38. In 1847 it again receded, and, this time, to 88.44; but only to remount, in 1848, to 90.36; and in 1849, as shown by his eleventh and last report, to 93.25. In this report he states that the "per cent. of recoveries on all recent cases discharged in eleven years, was 90.70." The reader will observe that all these proportions related to cases discharged, and his attention is called to the comments upon them, by Dr. Awl's successor, as presented upon a subsequent page.

But Dr. Awl was content with the permission to his numerals to speak for themselves. In this he was almost purely a statistician in Arabic. So far as I have learned, he neither vaunted his success, nor proclaimed the pre-eminent curability of insanity, in the text of his reports. Ardent, hopeful, joyful in temperament, he naturally presented his subject in a light sufficiently *couleur de rose*; but, for the same reason, he endeared himself to his colleagues, of whom every survivor would now exclaim, "May his genial heart still beat for a thousand years."

CHAPTER III.

HISTORY.—OPPONENTS.

HE would be mistaken who should entertain the belief that, throughout this period of apparent struggle for the largest numerical symbols, there was a unanimity of opinion and feeling among the medical superintendents of the institutions. Yet, whatsoever might have been thought, or in conversation expressed upon the subject, but little, if anything, appeared in the published reports discrediting either the asserted results of treatment, or the accuracy of the method by which the numerical statistics were obtained. Dr. Isaac Ray, in the report for 1842 of the State Asylum at Augusta, Maine, wrote as follows: "Nothing can be *made* more deceptive than statistics; and I have yet to learn that those of insanity form any exception to the general rule." But the first important shadow of this kind which was thrown upon the glamour of Arabic numbers was projected by Dr. James Bates, a man of sterling common sense, the successor of Dr. Ray. In his report for 1847-48 he used the following language:

"Few things are more various, in the numerous reports which come to hand from institutions similar to our own, than what are termed *recent* cases. In general, of late years, cases admitted within one year of the attack are denominated *recent*. This would be very well, and easily understood, if such cases were continued

to be *recent* cases, in the reports, until discharged. But such is not the fact. In one report which contained a table purporting to give the admissions and discharges of recent and old cases, it was seen that the recoveries, discharges, and deaths, together with recent cases remaining, were much less than stated in the admissions. Further examination showed that at the end of each year those remaining in hospital which had become of more than one year's standing, were turned over to the department of old cases.*

"By such a course, and rejecting deaths, paralytic and epileptic cases, and perhaps some others, from the aggregate, the cures of recent cases are very conveniently carried up to ninety per cent.

"It is probable, in some instances, this rejection and pruning away of exceptionable cases might be carried so far that one hundred per cent. of recoveries in recent cases could be reported, and received with wondrous admiration by that portion of the public who are better

* The practice mentioned may be illustrated as follows: A hospital receives one hundred *recent* cases, and reports them as such. It discharges eighty of them *while recent*; and, of these eighty, seventy have recovered. Consequently, seven-eighths, or eighty-seven and one-half per cent. of the *number discharged*, are reported as recovered. The remaining twenty of the original one hundred stay in the hospital so long that their disease has existed more than a year, and hence is no longer recent. They are then transferred to *chronic cases*, and thenceforth, in all statistics relating to them, are reported as such. It is thus made to appear that of the original one hundred cases, eighty-seven and one-half per cent. recovered, when, in fact, only seventy per cent. recovered. There was a time at which this practice was pursued at more than one hospital.

pleased with marvellous fiction than with homely truth."

Not satisfied with this, he again expressed his opinions, and perhaps more strongly, when discussing the subject of statistics, in his report for 1849-50. Says he,—

"When honestly made, they are not likely to do injury; but I am sure they are sometimes made the instruments of deception. If figures cannot lie, they may mislead by disguising the truth. For instance: suppose, at the end of each year, instead of reporting all cases as *recent* which were actually admitted within one year of the attack, I should, for the purpose of *appearing* to cure ninety per cent. of recent cases *discharged*, report only *such as recent* cases as had not become *old* ones by remaining with us, I might impose the belief on the *uninitiated* that ninety per cent. of recent cases could be cured, when every man acquainted with the subject knows that no instance can be shown in which ninety out of one hundred cases, admitted in succession, no matter *how recent*, were ever cured."

About this time Dr. S. Hanbury Smith, a man of broad culture and extensive professional knowledge, was appointed to the superintendence of the State Asylum for the Insane at Columbus, Ohio. In his report for 1850 he presents the statistics of all the recent cases of insanity received at that institution, from the time of its opening to the 30th of November of that year; and shows that the recoveries, according to the records, and including those remaining in the hospital who were believed curable, were equal to 75.43 per cent. "The curability of recent cases in this institution," he then

remarks, "would be exactly represented by these figures, were it certain that the word *recovered*, when entered opposite a name on the books of the institution, is always properly employed. The term has probably been applied to many cases which were only very much improved, but not in scientific strictness cured, seventy per cent. being considered by some authorities as about the limit of possible cures in recent cases."

Dr. Andrew McFarland's first report of the New Hampshire Asylum for the Insane was for the year 1846. He classified the cases of both admission and discharge into recent and chronic, but calculated no percentage. In his third report (for 1848) he dropped that classification and gave expression to his views in the following language:

"This is deemed a proper time and place to record a scepticism as to the value of a system of forming tables, or rather the want of system, in making important deductions, and establishing infallible percentages from extremely loose and insufficient premises, and all now engaged in the treatment of the insane appear to be arriving at the same conclusion."

CHAPTER IV.

HISTORY.—OTHER AUTHORITIES.

THE period of greatest mathematical curability had now very evidently passed; that spring-tide upon which the members of the regatta had been disporting for a

number, not inconsiderable, of years, had begun to ebb, and has continued to ebb, as will be shown farther on, to the present time, when it has reached, perhaps, upon the average, very nearly the true water level.

At this point, however, it may still further elucidate our subject to show the position in regard to it which was occupied by several medical superintendents in charge of institutions during some part of the period of high percentages, but of whom little or nothing has thus far been written.

Dr. Ray, at heart, never approved the course of the advocates of mathematical curability. Upon his entrance into the specialty it is not surprising that he joined them, but he did it under protest, and at the very first opportunity he threw off all allegiance to them. In his first report, which was that for the Maine Insane Asylum for the year 1841, he classified his cases into *recent* and *old*, the former term applying to those of less than one year in duration. "I have adopted this classification," says he, "in deference to the practice now somewhat common in New England hospitals; but I must be allowed to express my conviction that the distinction is without any precise, well-marked difference, and had better be abandoned."

In giving the results of treatment, he says, "Per cent. of recoveries of recent cases discharged in the course of the year, 71;" and then, in a foot-note, he remarks as follows: "Two of the recent cases discharged uncured were returned to the hospital and finally discharged, cured; so that really the per cent. of recoveries of recent patients is 75." In another place he

says, "Our proportion of recoveries in recent cases, as indicated by our books, has been 71 per cent., though, if we make allowance for cases prematurely removed, it amounts to 85 per cent., which is the average of recoveries obtained in the New England hospitals generally."

Dr. Ray never *built* a percentage a second time, in the hope to make his mathematical house as high as those of his neighbors. Thenceforward, both at the Maine Asylum and at the Butler Hospital, he discarded classification according to duration, eschewed percentages, and, especially at the institution last mentioned, dealt but little in other numerical statistics.

Dr. Amariah Brigham wrote but two annual reports of the Hartford Retreat. The last of these is the only one to which I have access. It is for the official year ending with the 31st of March, 1842. Before the termination of that calendar year he was appointed to the superintendence of the New York State Asylum, at Utica, which was opened, under his direction, on the 16th day of January, 1843. In the report of the Retreat he says, "The records of this, and of all kindred institutions, establish the fact that insanity is a disease that can generally be cured, if early and properly treated; while it is equally well established that if the disease is neglected, or suffered to continue for two or three years, it is rarely remedied. In his first report (for 1843) at Utica, he says, "Eighty patients have been discharged. Fifty-six of these were recent cases, that is, of not more than twelve months' duration. Of this number, forty-nine recovered." The percentage of these recoveries is not stated, and neither in the report of the Retreat, nor any one of the six annual reports

which he lived to write at Utica, have I found any such percentage. He did not classify his cases in tabular form, as recent and chronic, and the instance just quoted is the only one in which, as regards recovery, he mentioned the numbers with such a discrimination. He was not a competitor in the regatta of mathematical curability. But in this connection, and as a matter illustrative of our subject, I copy the following from his last report for the Retreat:

"By *recovered*, we usually mean complete restoration of the mental powers. Two of the individuals discharged this year, and reported as recovered, are still very eccentric, though they do not now manifest anything that their friends call insanity, are able to attend to their affairs, and are as well as they were for several years before they were called insane.

"Some few other individuals, though reported recovered, did not, when they left us, exhibit their former mental vigor. From several of these we have heard that, at home, they have entirely recovered in this respect, or are steadily improving. With these few exceptions, those that we have reported recovered we consider completely so."

If limitations so comprehensive were given to the term "recovered" by a *moderado*, like Dr. Brigham, what might not be granted to it by an ultraist, such as were some of the medical superintendents?

In the annual presentation of the medical history of the Pennsylvania Hospital for the Insane, Dr. Thomas S. Kirkbride has very prudently and properly avoided the classification of patients according to the duration of the disease; and, although apparently a believer in

the curability of insanity to an extent which would not be accorded by a large proportion of the superintendents of the present day, he has never been among the extremists, has written but little upon that specific point, and has invariably, I believe, shunned percentages in Arabic numerals. In an examination of his first fifteen annual reports, I find but two allusions to the curability of the disease, of sufficient directness and importance to come within the scope of this discussion. In the report for 1842 he says, "The general proposition that truly recent cases of insanity are commonly very curable, and that chronic ones are only occasionally so, may be considered as fully established."

In the report for 1846 the proposition is made rather more definite by the use of a percentage—perhaps the only one to be found in his reports—expressed in words. "Of all who are attacked with insanity, and subjected during its early stages to a judicious treatment, and that treatment faithfully persevered in, at least eighty per cent. will probably recover."

In his report for 1844, of the Bloomingdale Asylum, New York, the first which was issued after he became connected with it, Dr. Pliny Earle presented a table of "cases supposed to be recent," in which it is stated that the number discharged was fifty, of which forty-five had recovered. Nothing was said of percentage in regard to them; but the subjoined extract is taken from the context:

"It appears to be very satisfactorily proved that, of cases in which there is no eccentricity or constitutional weakness of intellect, and when the proper remedial measures are adopted in the early stages of the disorder,

no less than *eighty* of every *hundred* are cured. There are but few diseases from which so large a percentage of the persons attacked are restored."

In his report for 1845, the table of recent cases states that of fifty-seven cases discharged, thirty-six were cured; and in connection therewith, it is remarked that four others, "discharged *much improved*, were entirely well a short time after they left. These make the number of cures in recent cases *forty*."

In a discussion of the subject of treatment, in the same report, occurs the following proposition: "When the insane are placed under proper curative treatment in the early stages of the disease, from seventy-five to ninety per cent. recover."

The author of those reports deprecates, in regard to these extracts, no comment which he has here applied to the same assertions, or assertions equally strong, but no stronger, by any one of his colleagues. But, thirty-two years ago, Dr. Earle was somewhat younger than he is now, and had not had the benefit of so extensive an experience. His practical knowledge of the treatment of insanity, at that time, had been derived from a number of cases very considerably less than that of those who are under his care to-day. He has had time, and opportunity, and reason to modify many of his opinions; and among those modified opinions is that of the curability of insanity. Doubtless there are others of the writers here quoted who would now seek protection, and who deserve it, under a similar plea.

The reports of Dr. William H. Rockwell, of the Vermont Insane Asylum, were models of sententious brevity. Their author indulged sparingly in numerical

statistics, but he always gave the percentages of recoveries calculated upon the number of patients discharged, and with unvarying discrimination between "old cases" and "recent cases." The percentages of the recent cases always ranked among the highest, but only in one instance did they exceed *ninety*. This was in 1839, when the percentage was 91.33. In all the other years from 1838 to 1845, inclusive, they fluctuated between the two extremes, 87.50 and 89.74.

In his report for 1849, in connection with a summary of all the patients theretofore treated at the institution, it is stated that, "of those placed at the asylum within six months from their attack, nearly nine-tenths have recovered."

Dr. William H. Stokes, in the report for 1845 of the Mount Hope institution at Baltimore, Maryland, discoursed as follows:

"In our former reports, for 1843 and 1844, we assumed the high ground that not merely *nine* out of *ten* cases of insanity, of a less duration than one year, may be cured, but that *ninety-nine* in a *hundred* can be radically restored, unless there exists in the individual a strong constitutional tendency to mental disease, or unless circumstances beyond our control, and the injurious tendency of which has been fully explained, intervene to interrupt and disturb the process of cure. This position has been fully sustained, as the report will show, by the experience of the past year."

In respect to this quotation, it may be remarked that, while the proposition may be strictly true, as interpreted by an expert of long experience, yet the popular reader would be likely to remember the large pro-

portions in its assertive clause, while forgetting, or rather not knowing, the broad scope of the contingent clause, as introduced by the word *unless*. These contingencies have, since that time, practically proved their power in the very great reduction of the assumed proportions. Ninety-nine cases in a hundred of *any* disease may be cured, unless *something* prevents.

In the report for 1841 of the Western Lunatic Asylum, at Staunton, Virginia, Dr. Francis T. Stribling, a most estimable man and an excellent superintendent, introduced a numerical table to which he appended these remarks :

“From this table it will be perceived that the whole number of recent cases during the year, in which an opportunity has been afforded to test the use of medicines, amounts only to twenty-one, of whom eleven were males, and ten females. Of these, seventeen recovered, nine males and eight females ; two females are improved, one male is stationary, and one male died. From this estimate is excluded, of course, those patients who entered the institution within the last twenty days, as their stay has been of too short duration for the effects of remedies to be developed. The individual above included as having died, was only here sixteen days, and for the same reason should also be excluded, which would leave as proper subjects for this table twenty only, of whom eighty-five per cent. have recovered, a result which we confidently believe will bear honorable comparison with that in any other insane institution in existence, and one which should speak trumpet-tongued to those misguided individuals who, notwithstanding the lights which have been shed upon this important subject

within a few years past, obstinately persevere in retaining their insane friends at home, or in situations equally unfavorable, until their malady becomes confirmed and they are rendered, for life, the victims of insanity, it may be, in some one of its most aggravated and distressing forms."

His report for 1844 contained, in tabular form, the number of recent cases admitted from July 1, 1836, to December 31, 1844, together with the results of treatment and the percentage of those results. The recoveries, as calculated upon the admissions, were equal to eighty-two, and as calculated upon the discharges, ninety-three per cent.

Of writers other than the medical superintendents, there is but one the opinions of whom it appears necessary here to notice.

Several years ago, Dr. Edward Jarvis wrote as follows:

"In a perfect state of things, where the best appliances which the science and skill of the age have provided for healing are brought to bear upon these lunatics in as early a stage of their malady as they are to those who are attacked with fever or dysentery, probably eighty, and possibly ninety per cent., would be restored, and only twenty, or perhaps ten per cent., would be left among the constant insane population."

To the superficial reader, particularly if he be young and enthusiastic, this reads well, appears full of promise, and *may* be received as the assertion of a positive proposition in scientific truth. The thoughtful reader finds it too heavily laden with the conditional, the doubtful, and the impossible. "Go to the foot of the

rainbow"—how often it was heard, and how it excited our admiration in boyhood!—"and you will find a golden cup." "In a perfect state of things," the writer might better have said, "there would be no insanity," for that would have been a positive truth. The "perfect state of things" which he fancied, is unattainable, and consequently the whole substance of the proposition is little better than speculation.

It is utterly impossible, and so will it continue to be throughout all time, unless the characteristics of insanity undergo very important changes, to subject the insane to curative treatment at as early a stage of their disorder as are persons seized with fever or dysentery. In a very material proportion of the cases—more than ten, and, in my opinion, more than twenty per cent.—the approach of the malady is so slow and insidious that the insanity is not recognized, often not suspected, until it has passed the period in which it might have been amenable to appropriate treatment. Hence, practically, it is chronic and incurable from the beginning. To this class belong all cases of paresis—the *paralysie générale* of the French—as well as those in which natural peculiarities or eccentricities gradually increase with advancing years, until they become so exaggerated as to be generally and properly accepted as the manifestations of insanity; those in which the brain and the nervous system in general succumb, hopelessly and somewhat suddenly, to the accumulated deleterious effects of intemperance in intoxicating drinks and of other forms of dissipation; and those of "spoiled children" who, by the results of unwise management during the periods of youth and adolescence, become

some of the annoyances, *par excellence*, of the hospitals. There are other cases still, but it is unnecessary here to mention them.

The last clauses of the proposition quoted from Dr. Jarvis, those which express the deduction or the sequence of the conditional premises, are deprived of force by the assertion of a "probability" and a "possibility," instead of a certainty. But, as has been shown, the certainty has not been, and it cannot be, demonstrated. At most, then, the quotation, strictly interpreted, signifies that by the performance of an impossibility, you may arrive at a probability or a possibility.

But very much to my surprise, and, as I apprehend, to that of every person of long and large experience with the insane, Dr. Jarvis has quite recently repeated his proposition, modified to a more positive form. "Under appropriate influences," says he, "insanity is among the most curable of grave diseases. If the persons who are attacked with this disorder are as promptly cared for as others when attacked with fever, dysentery, pneumonia, etc., eighty or ninety per cent. can be restored to health and usefulness."*

But even this is the expression of a hypothesis which requires, as is shown above, an impossibility,—the placing of the patient under treatment as immediately as in the other serious diseases mentioned.

Familiarity with the writings of Dr. Jarvis, and a personal acquaintance with him of not less than thirty-five years, have led me to regard him as one of the

* Fifth Annual Report of the State Board of Health of Massachusetts, page 382.

ablest statistical philosophers of the United States. Perhaps no American has been more deeply interested in the subject of insanity than he, and few have made themselves so extensively acquainted with its literature. His practical knowledge of it is, nevertheless, but small. He has never been connected with a public hospital for the insane, except for a few years as trustee, and his experience in the treatment of the disease is limited to cases in general practice, and a comparatively very small number in a private asylum. Had his observation extended over the large numbers who have been under the care of any one of a dozen superintendents who might be named, he never, as I believe, would have written either of the foregoing extracts; for he is a conscientious searcher after truth, and no less conscientious in the expression of what he believes to be the truth.

But the essence of the proposition is not original with Dr. Jarvis. Dr. Woodward, as has already been shown, expressed and published it forty years ago. Dr. Burrows did the same more than fifty-five years ago. Upon page 37 of the "Inquiry," already mentioned, he says he has "a clear conviction that it (insanity) admits of cure in a ratio equal with almost any disorder marked by as strong indications of morbid action in the corporeal system;" and farther on (page 50), reasoning from his own success, as shown by his numerical statistics, he adds, "It is a legitimate inference that, if no other impediments than are usually opposed to the successful termination of corporeal diseases supervened, the recoveries of cases of insanity would be actually in excess" of those of other diseases.

CHAPTER V.

THE EBBING TIDE.

IT is now proposed to introduce the statistics of some authorities who have not found mental disorders, when treated within a twelvemonth from the time of invasion, to yield to curative measures in so large a proportion as most of those hitherto quoted. They deal with comparatively large numbers of cases, and hence are more reliable as premises from which to deduce truthful results than the twenty-three cases of the Hartford Retreat, which, thanks to Basil Hall, made so much noise in the world; or the thirteen cases of Dr. Galt, upon which he claimed the championship of success; and, being based upon all the cases *admitted*, their results are more truthful, as an expression of actual curability, than the highest percentages of Drs. Woodward and Awl, which were derived from the numbers of cases *discharged*. The first, and the most valuable for our present purpose, of these statistics, are those of the Friends' Asylum at Frankford, Philadelphia. They are the most valuable, because of the means of their analyzation, to a certain extent, with which I have been furnished by Dr. Worthington.

The Friends' Asylum was opened in 1817. It is a small institution, the number of its patients at any time not having been one hundred. Hence every patient comes more directly and constantly under the observa-

tion and influence of the physician-in-chief, and is more subjected to individual treatment than is practicable in the large hospitals. No public or corporate institution in the country approaches more nearly to the ideal cottage plan. It has always been well managed, and its rank as a first-class curative institution has never, to my knowledge, been questioned.

The report of that asylum for the year 1876 informs us that the whole number of cases of less than twelve months' duration, admitted since the opening of the institution, was 1061. Of these *cases*, 697, or 65.69 per cent., recovered. This proportion is already small compared with some which have been noticed. But let us examine a little farther. Of these 1061 *cases*, 187 were of *readmissions*. Hence the number of *persons* was 874. Eighty-seven of these *persons* recovered 274 *times*, or 187 times more than the number (87) of persons. These were duplicate or multiplicate recoveries. Subtracting them (187) from the total (697) recoveries, the remainder is 510 recoveries, and these are the recoveries of *persons*. Consequently, of 874 *persons*, 510 recovered. This is equivalent to a percentage of 58.35. This process makes a material alteration in the aspect of things, if the proposition be to ascertain the proportion of recoveries of insane *persons*. Only 58 (without the fraction) of each 100 recovered. And these were not all *permanent* recoveries. Of the 510 persons who recovered at least once each, 87 were admitted on subsequent attacks. Therefore, at most, only (510 less 87) 423 *persons* were *permanently cured*. This is but 48.39 per cent. of the whole (874), or *less than forty-nine in each hundred*. It is very far from certain, it is not even

probable, that so many were permanently cured. Who knows how many of them suffered from subsequent invasions of the disorder, slighter, perhaps, than the first, and for this reason—or perhaps quite as severe as the first, and for some other reason, for such reasons are many—detained and treated at home? Who can tell the number that, having a recurrence of the malady, were taken to some other institution? Such changes are not infrequent, and in this instance would be particularly likely to occur, from the fact that, in the course of the period during which these persons were admitted, several other excellent institutions were established within the territory from which the Friends' Asylum, in its earlier years, received its patients.

At some of the institutions, a number not inconsiderable of the admissions of recent cases are not cases of insanity, properly so called, but of delirium tremens. My impression is that but few, if any, of these have been treated at the Friends' Asylum. But if any there have been, the number of them should be rejected, and the recoveries would thus be proportionately reduced.

Any person who is interested in the subject will not neglect carefully to study the foregoing analysis. Considering all the circumstances, there is no collection of *cases* in America which more fairly represent the actual curability of mental disorders when subjected to treatment within the year, than those of the Frankford Asylum. Yet, as they stand in mass, they offer neither ninety, nor eighty, nor seventy-five, nor seventy per cent. of recoveries; and the moment their columns are broken and they are subjected to such analysis as will detect the number of *persons* recovered, the proportion

rapidly falls to a point below fifty per cent., still leaving unexamined influences which would probably carry it materially lower.

The report for 1869 of the Asylum at Dayton, Ohio, which was at that time under the superintendence of Dr. Richard Gundry, contains the results of treatment, in respect to restoration, of all the patients admitted in the course of the fourteen years during which that institution had been in operation. Of the 1427 cases the duration of which did not exceed one year, 831, or 58.23 per cent., recovered. But these were *cases*, not *persons*. Were the proper deductions made, as in the cases at Frankford, for readmissions, it would be found that the recoveries of *persons* was little, if any, in excess of fifty in the hundred. Other proper deductions would doubtless reduce them below fifty per cent.

Of the 1427 *cases*, 530 came under treatment within one month subsequent to the attack. Of these, 363, or 68.49 per cent., recovered. The recoveries of *persons* probably but slightly exceeded 60 per cent. The very large proportion taken thus early to the hospital justifies the suspicion of many cases of delirium tremens, and many readmissions.

Dr. Godding, in the last published report of the State Hospital at Taunton, informs us that "out of 3131 patients admitted to the hospital, where the disease was of less than six months' duration at the time of admission, 1351 recovered." This is 43.14 per cent. These were *cases*, and not *persons*; and they do not include the cases of from six to twelve months' duration,—the most incurable of the cases which have existed less than a year. In justice, however, to Dr. Godding, no less

than to truth, both scientific and general, it should be mentioned that the pressure of patients upon the Taunton Hospital has been so great, for several years, that many have been hurried away from it without sufficient trial of curative treatment; and that doubtless there was a no inconsiderable number of those who would otherwise have recovered.

It may here be mentioned, as bearing upon the subject under discussion, that at the Worcester Hospital, under Dr. Woodward, during the second period of five years of its operations, the per cent. of recoveries of recent cases was 90.1, yet, twenty-four years later, under Dr. Bemis, during the period of five years, from 1864 to 1868, inclusive, it was but 68.8. In both instances these were *cases*, and *not* persons; and the percentage was upon patients *discharged*, and not upon patients admitted.

Dr. Stearns, in the report of the Hartford Retreat for the official year ending with the close of March, 1876, asserts that during the first nine years of the operations of that institution, which was then in charge of Dr. Todd, 90.1 per cent. of recent cases recovered. Forty years afterwards, during the six years from 1869 to 1874, inclusive, under Doctors Butler, Denny, and Stearns, in succession, only 62.3 per cent. recovered. The proportion of recoveries during the first period was 44.62 per cent. greater than it was during the last period. If the proportion during the second period be represented by 100, that of the first period is represented by 144.62.

The first European authority (Dr. Burrows) quoted in the discussion of this subject, is that of an eminent

psychologist of London, fifty years ago. We have now arrived at a point where the recent language of another eminent psychologist, of the same city, may very appropriately be introduced. He speaks not alone from his own observation, which has probably been as extensive as that of Dr. Burrows, but out of the accumulated knowledge of the vastly enlarged experience of the last half-century in England. Dr. G. Fielding Blandford, lecturer on Psychological Medicine at the School of St. George's Hospital, London, uses the following language in his treatise upon mental disorders, lately published:

"If we could carefully watch every case of insanity from its commencement, I fear we should see that a less number than fifty-three per cent. recover from the first attack, so great is the proportion of those who are incurable from the first, or who, from the prejudices of friends, are not subjected to treatment till the chance of cure is gone; and if, by dint of proper treatment, the above percentage recover, they only recover, again to become insane in a large proportion."

Such was the testimony in the British capital, in 1870, precisely fifty years after the publication of the "Inquiry" by Dr. Burrows.

CHAPTER VI.

CURABILITY IN ALL HOSPITAL CASES.

HAVING given a historical sketch of the means by which an impression of the eminent curability of insanity, in its recent stages, has been widely impressed upon the minds of persons more or less interested in the subject, and shown that the opinions of the writers who were chiefly instrumental in the production of that impression have not been sustained by subsequent and more enlarged experience, I now propose to give a cursory glance at the question of curability, in that broader signification which embraces all classes of cases, both recent and chronic, as they are received at the curative institutions.

Every person who has made himself conversant with the operations of the hospitals during the last thirty years, cannot fail to have observed the constantly diminishing number of reported recoveries, relatively to the number of patients admitted.

At the State Hospital in Maine, in the five years from 1846 to 1850, inclusive, 587 patients were admitted, and 285, or a proportion of 48.55 per cent., recovered. At the same institution, in the five years from 1871 to 1875, inclusive, 953 were admitted, and 349, or a proportion of only 36.62 per cent., recovered. The difference in the per cent. of recoveries is 11.93.

At the McLean Asylum, in the five years from 1823

to 1827, inclusive, the admissions were 290, and the recoveries 118, or 40.69 per cent.; while in the five years from 1871 to 1875, the admissions were 420 and the recoveries 91, which is only 21.66 per cent. The difference is 19.03 per cent. The proportion of recoveries is but little more than one-half as great as it was half a century ago.

At the Worcester Hospital, during the five years from 1839 to 1843, inclusive, 922 cases were admitted, and 448, or 48.59 per cent., recovered. During the five years from 1871 to 1875, inclusive, 2060 were admitted, and 613, or only 29.75 per cent., recovered. The ratio of recoveries is but about three-fifths as great as it was thirty-five years ago.

At the Utica Asylum, from 1848 to 1852, inclusive, 1890 cases were admitted, and 816 recovered, which is 43.17 per cent.; whereas, from 1871 to 1875, inclusive, 2125 were admitted, and 687, or only 32.33 per cent., recovered. The proportion of recoveries is about three-fourths as large as it was twenty-five years ago.

In each of these illustrative instances, the beginning of the first of the two periods of five years between which a comparison is instituted was five years after the institution went into operation. For example, the Maine State Asylum was opened in 1840, and the first period used in the comparison is from 1845 to 1850. This was done for the purpose of avoiding the unnatural or abnormal influence, whether favorable or unfavorable,—as a general rule the latter,—of the cases which are taken to any new institution within the first year or more after its opening. After the lapse of five years, the current of admissions, it is assumed, has attained

its normal character in respect to the curability of the patients.

In the last report of the Hartford Retreat, Dr. Stearns informs us that, at that institution, the percentage of recoveries "on all admissions" from 1824 to 1833, inclusive, was 55.5. During the next six years, from 1834 to 1839, inclusive, it was 56.90; during the five years from 1847 to 1851, it was 48.10; during the thirteen years from 1855 to 1867, inclusive, 45.7; and during the six years ending with 1874, it was 37.8. The difference of the extremes is 19.1. Hence, in about forty years, the proportion of recoveries upon admissions diminished (from 56.9 to 37.8 per cent.) a little more than one-third.

It is unnecessary to pursue this detailed illustration any farther. The cumulation of evidence may be presented in a manner more condensed. The table here subjoined contains the principal facts of evidence, as furnished by the reports of twenty institutions.

INSTITUTION.	Second five years from opening.	Last five years.	Total admitted.	Total recovered.	Per cent. of second five years.	Per cent. of last five years.	Decrease of per cent.
Augusta, Maine.....	1846-50	.....	587	285	48.55	.....	.....
" " .....	.....	1871-75	953	349	.....	36.62	11.93
Concord, N. H.....	1848-52	.....	471	221	46.92	.....	.....
" " .....	.....	1872-76	746	246	.....	32.97	13.95
Brattleboro', Vt.....	*1841-46	.....	793	345	43.50	.....	.....
" " .....	.....	*1871-76	667	203	.....	30.43	13.07
McLean, Mass.....	1823-27	.....	290	118	40.69	.....	.....
" " .....	.....	1871-75	420	91	.....	21.66	19.03
Worcester, Mass.....	1839-43	.....	922	448	48.59	.....	.....
" " .....	.....	1871-75	2060	618	.....	29.75	18.84
Taunton, Mass.....	1859-63	.....	1132	492	43.46	.....	.....
" " .....	.....	1871-75	2189	506	.....	23.11	20.35

* These are periods of *six* years each, rendered necessary by the fact that the hospitals issued reports biennially.

INSTITUTION.	Second five years from opening.	Last five years.	Total admitted.	Total recovered.	Per cent. of second five years.	Per cent. of last five years.	Decrease of per cent.
Butler Hospital.....	1854-58	.....	279	111	39.78	.....	.....
" " .....	.....	1872-76	520	185	.....	35.57	4.21
Hartford Retreat.....	1829-33	.....	324	186	57.40	.....	.....
" " .....	.....	1870-74	533	209	.....	39.21	18.19
Bloomingtondale, N. Y.	1826-30	.....	635	302	47.55	.....	.....
" " .....	.....	1871-75	602	196	.....	32.55	15.00
Utica, N. Y.....	1848-52	.....	1890	816	43.17	.....	.....
" " .....	.....	1871-75	2125	687	.....	32.33	10.84
Flatbush, N. Y.....	1861-65	.....	1072	449	41.88	.....	.....
" " .....	.....	1871-75	1700	563	.....	33.11	8.77
Trenton, N. J.....	1853-57	.....	715	306	42.79	.....	.....
" " .....	.....	1872-76	996	312	.....	31.32	11.47
Pennsylvania Hosp..	1846-50	.....	1037	530	51.10	.....	.....
" " .....	.....	1871-75	1371	570	.....	42.30	8.80
Dixmont, Pa.....	1861-65	.....	479	181	37.78	.....	.....
" " .....	.....	1871-75	1156	347	.....	30.01	7.77
Catonsville, Md.....	1839-43	.....	376	194	51.59	.....	.....
" " .....	.....	1871-75	671	274	.....	40.83	10.76
Newburgh, Ohio.....	1860-64	.....	579	270	46.63	.....	.....
" " .....	.....	1871-75	1352	406	.....	30.03	16.60
Dayton, Ohio.....	1860-64	.....	492	296	60.16	.....	.....
" " .....	.....	1870-74	1737	786	.....	45.25	14.91
Indianapolis, Ind ...	1853-57	.....	826	473	57.26	.....	.....
" " .....	.....	1871-76	1932	1014	.....	52.48	4.78
Jacksonville, Ill.....	*1855-60	.....	937	436	46.53	.....	.....
" " .....	.....	*1869-74	1818	581	.....	31.96	14.57
Mendota, Wis.....	1865-69	.....	680	230	33.82	.....	.....
" " .....	.....	1871-75	835	216	.....	25.86	7.96

The total of admissions at the twenty institutions, in the course of the first period (second five years of operation), is 14,516; the number of recoveries, 6689; and the proportion of recoveries on admissions, 46.08 per cent.

The admissions during the second period (last five years) were 24,383; the recoveries, 8354; and the per cent. of recoveries, 34.26.

The recoveries diminished from 46.08 to 34.26, which is 11.82. The diminution of recoveries is equal to nearly twenty-six (25.65) per cent. of the recoveries of

the first period. For every hundred that recovered on an average of twenty-five years ago, only a fraction over seventy-four (74.35) now recover.

The reader will observe that in all of the contents of this table, the figures relate to *cases*, and not to *persons*. The depreciation of percentage in such statistics, if the object be to ascertain the proportionate recoveries of insane *persons*, has been clearly illustrated. If only thirty-four (34.26) in each hundred of the *cases* now received into the hospitals are discharged recovered, the recoveries of *persons* cannot be more than about thirty in the hundred.

CHAPTER VII.

DEDUCTIONS.

It has now been shown that,—

1. The reported recoveries from insanity are increased to an important extent by repeated recoveries from the periodical or recurrent form of the disease in the same person ; and consequently,—

2. The recoveries of *persons* are much less numerous than the recoveries of *patients*, or *cases* ; and consequently,—

3. From the number of reported recoveries of *cases*, or *patients*, it is generally impossible to ascertain the number of *persons* who recovered.

4. The number of reported recoveries is influenced, sometimes largely, by the temperament of the reporter ;

each man having his own standard, or criterion, of insanity.

5. The large proportion of recoveries formerly reported was *often* based upon the number of patients *discharged*, instead of the number *admitted*, and, *generally*, upon the results in a number of cases too small to entitle the deduction therefrom of a general formula of scientific truth; and those proportions were evidently increased by that zeal and rivalry which frequently characterize the earlier periods of a great philanthropic enterprise.

6. The assumed curability of insanity, as represented by those proportions, has not only not been sustained, but has been practically disproved by subsequent and more extensive experience.

7. The reported proportion of recoveries of all cases received at the institutions for the insane has been constantly diminishing during a period of from twenty to fifty years.

The last clause under the fifth of these heads suggests the remark that, at a later period in the life of Dr. Luther V. Bell than that in which he wrote what is quoted in this article, his opinions in regard to the general curability of mental disorders underwent an important modification. He then regarded them as far less susceptible of cure than he had believed them to be in his earlier years; and the language which he used upon the subject contrasted so strongly with some of that which is herein quoted from his writings, that it might be alleged as indubitable proof that "a wise man sometimes changes his opinions."

If the causes of the general reduction of the propor-

tion of recoveries, as stated under the seventh head, be sought, some of them will be found in, or inferred from, preceding portions of this discussion.

Among others are, first, the probable fact that, as institutions have multiplied, the proportion of chronic and incurable cases taken to them has increased; and, secondly, the not improbable fact that insanity, as a whole, is really becoming more and more an incurable disease. If it be true, as asserted by that accomplished scholar and profound thinker, Baron Von Feuchtersleben,—and doubtless no one will deny its truth,—that in the progress of the last few centuries, as civilization has advanced and the habits of the race have been consequently modified, disease has left its stronghold in the blood and the muscular tissues, and at length seated itself in the nervous system; it follows, perhaps, as a necessary consequence, that by a continuation of the cause of this change, the diseases of the brain and nerves *must* become more and more permanent.

Hence it has happened that the proportion of recoveries from insanity has not kept pace with the improvement of hospitals and of the management of the insane.

Dr. Isaac Ray, in his report of the State Hospital in Maine, for the year 1844, asserted that “he would be a bold man who should venture to say that Pinel and Esquirol, whose medical treatment was confined chiefly to baths and simple bitter drinks, were less successful in their cure of mental diseases than those numerous practitioners who have exhausted upon them all the resources of the healing art.”

If the assertion was true thirty-two years ago, it is believed that the contents of this exposition sufficiently

prove that it is, to say the least, none the less true at the present day. The years of a generation have passed since that time, and, in the course of their progress, remedy after remedy before untried has come up, big with the word of promise to the hope, but essentially breaking it to experience. Haschish was experimentally tried, proved a failure, and is now nearly forgotten. Chloroform and ether have become convenient and useful to a certain extent, but they have no curative power previously unknown in other remedies. The same may be said of chloral and the bromides. Electro-magnetism, upon which great hopes were placed, is very beneficial in a few cases of disordered nervous action, but hitherto has proved itself powerless to correct those cerebral functions the abnormal operations of which constitute insanity.

It would appear, indeed, that the truth of Dr. Ray's proposition would have been little if any affected, if he had gone back to a period a full century anterior to the time of Pinel. Dr. Burrows informs us, on the authority of Dr. Tyson, physician at Bethlehem at the time, that from 1684 to 1703, 1294 patients were admitted to that hospital, and 890 recovered. This proportion of recoveries is almost sixty-nine (68.77) in the hundred. But epileptics, paralytics, and perhaps some other incurables, were not admitted at Bethlehem at that time.

The reported recoveries at the same hospital, one hundred years later, in the decade from 1784 to 1794, were thirty-four in a hundred. By a remarkable coincidence, this proportion is almost identical with that (thirty-four and one one-hundredth) of the recoveries in all the institutions for the insane in England and Wales

during the sixteen years from 1859 to 1874, both inclusive.

In approaching a conclusion, I quote from Dr. Thurnam his estimate of the curability of the insane, derived from a more thorough investigation of the subject, as presented in the patients treated at the Retreat in York, England, during a period of forty-four years, than has ever been attempted by any other writer. I have long regarded this estimate as the most nearly accurate, and hence the most reliable, of any that has been published; and it is believed that the attentive reader of what has here been written will have arrived at a similar conclusion:

“In round numbers, then, of ten persons attacked by insanity, five recover, and five die, sooner or later, during the attack. Of the five who recover, not more than two remain well during the rest of their lives; the other three sustain subsequent attacks, during which at least two of them die. But, although the picture is thus an unfavorable one, it is very far from justifying the popular prejudice that insanity is virtually an incurable disease; and the view which it presents is much modified by the long intervals which often occur between the attacks; during which intervals of mental health (in many cases of from ten to twenty years' duration) the individual has lived in all the enjoyments of social life.”

Drs. Bucknill and Tuke, in their “Psychological Medicine,” by far the best general treatise upon insanity in the English language,—and there is reason to believe that it has no superior in any other language,—so far endorse the results obtained by Dr. Thurnam, as

to quote, not alone this extract, in which they are embodied, but the statistical table from which they are derived.

CHAPTER VIII.

CONCLUSION.

OUR attention may now be redirected to the propositions at the beginning of this discussion, with a view to ascertain the effect of the facts and opinions herein adduced. In brief, then, it appears that it may fairly be asserted, first, that all estimates based upon the assumption that either seventy-five, or seventy, or sixty, or even fifty per cent. of the *persons* attacked with insanity can, at the time of admission to the hospitals, be cured and returned to the class of permanent producers in the sphere of human labor, are necessarily false, and consequently are both "a delusion and a snare;" and, secondly, that if the Vermont Asylum for the Insane can be justly censured or condemned because of the diminution in the proportionate number of its reported recoveries, its sister institutions, throughout the land, are generally in the same category of censurable organizations, and are open to a like condemnation.

Although it has here been shown, beyond cavil or question, that, as a whole, the *cases* of insanity are less curable than has, by many, heretofore been believed, and that the same is far more emphatically true of insane *persons*; yet, by so doing, no argument has been

developed against the utility of hospitals, nor has the practical value of those establishments been in the least diminished. False impressions of their value may have been corrected; and, to that extent, not alone has the cause of truth, which is better than error, been promoted, but a measure of protection has been furnished to the medical officers of the hospitals. The declarations of the earlier superintendents are returning, like boomerangs, to spend their ultimate force upon their promulgators, or, as in the instance of the Vermont Asylum, herein mentioned, upon the persons now standing in the places of their promulgators. It is here demonstrated that there is a proper shield against their offensive assaults.

Meanwhile the institutions for the custody and cure of the insane have become a public necessity, and have proved themselves a greatly beneficent blessing to the people. Through their ministrations *very many* persons of disordered or perverted intellect have been restored to their homes, their friends, and their spheres of usefulness in society, permanently "clothed and in their right mind." Even to the political economist, or the sheerest utilitarian, this is a fact of significant importance; and, by the philosopher, the philanthropist, or the Christian, it must be regarded as a blessing above and beyond all estimate in standards of pecuniary value. Nor are the duplicate or the multiply recoveries of the persons subject to mental disorders of the recurrent type, to be too lightly estimated. A recovery is none the less desirable, and none the less valuable to the person, or to society, *so long as the person remains well*, because it is of limited duration.

While, then, the hospitals continue their progress in the fulfilment of their beneficent mission, it would appear that the better course for the superintendents is to discard, universally, as they already have discarded, to a great extent, the classification of their cases according to duration; but constantly to keep before the people the great truth that, as a rule having comparatively few exceptions, the sooner the person attacked with insanity is placed under curative treatment, the greater is the prospect of recovery.

STUDY SECOND.

(WRITTEN IN 1877.)

THE First Study contains an exposition of the means by which, prior to 1876, it had become a commonly received opinion, among non-professional persons interested in the subject, in this country, that insanity is an eminently curable disease. It is there shown that, by mistaking *cases* for *persons*, and percentage of recoveries of patients *discharged* for percentage of recoveries upon patients *received* at the hospitals, it had come to be generally believed, that, if sufficiently early subjected to treatment, from 75 to 90 per cent. of all *persons* becoming insane can be cured, and restored from the class of mere consumers to the class of producers of the necessities for human sustenance.

"A wise man," says Pinel, "is cautious how he becomes the echo of a commonly received opinion;" and the necessity and prudence of such caution are strikingly exhibited in the results of our exposition of methods of reporting, and in our analysis of some of the most trustworthy statistics upon which the aforesaid opinion must rely for its support. That opinion has been not only echoed, but re-echoed, throughout the land. A comparatively brief discussion of its merits has demonstrated it to be one of the greatest of fallacies.

It is there shown that a very important proportion of the recoveries of recent cases are merely the temporary and repeated restorations of a comparatively small number of persons from paroxysms, more or less transient, of periodical or recurrent insanity. As, in a theatre, a score of supernumeraries, marching in regiments across the stage and disappearing only to reappear again, may impress the uninitiated with an ideal army of no insignificant numbers; so, in the drama of life, a few men and women, by entering and leaving the hospitals, as they sometimes do, with an industry of change quite remarkable, may send forth to an admiring world a large number of statistical recoveries. And as, upon the stage, the few men who appear as an army of soldiers are *not* soldiers; so most of the small number of persons who, at the hospitals, make a show of many recoveries, have not *really* recovered. In the former case there are *no soldiers*; in the latter, no—or but few—*permanent cures*. The almanac, a very popular work on statistics, reports thirteen *new* moons every year; and yet all of these new moons are nothing more nor less than the old one. So Worcester Hospital had a patient who recovered seven times, and hence was counted as seven patients recovered, in one year; and yet she was nothing more nor less than the old patient who had recovered five times in the next preceding year, and four times in the year one farther removed in the past.

“How many cows have you?” inquired a man of an amateur farmer. “My brother and I,” was the reply, “have twenty.” Now, although this statistician told the truth, so far as he spoke, and although “figures

cannot lie," yet it so happened that the inquiring man was grossly deceived. The whole truth in regard to possession was, that the brother owned *nineteen* of the cows, and the man himself only *one*.

The superintendents may honestly claim that they truthfully report their recoveries; but, nevertheless, they report them in such manner that they have been greatly misunderstood, and have consequently led to the most glaring errors. The courts of judicature require a pledge to tell not only the truth, but the *whole* truth.

NEW HAMPSHIRE REPORT.—It is very easy, in preparing their reports, for the superintendents of the hospitals so to explain their cases of recovery that the general misapprehension in regard to them may be corrected. Dr. Bancroft, of the State Asylum at Concord, New Hampshire, in his last report, which was written since the publication of the First Study, has introduced such an explanation. His recoveries, as reported in mass, were thirty-six; but, in allusion to them, he says, "*Fifty-eight per cent. of the recoveries are of persons who have some time recovered from previous attacks.*"* Furthermore, he publishes a new table, in which he shows the *number* of attacks from which they had recovered. The exposition is, in brief, as follows: Of the thirty-six persons who recovered, twenty-one (58 per cent.) had previously been insane and recovered. *Eight* had previously recovered from *one* attack; *seven* from *two* attacks; *one* from *three* attacks; *two* from *four* attacks; *one* from *five* attacks; and *two* from *seven* attacks

* Not italicized in the original.

each. In other words, those twenty-one *persons* had *previously* given *fifty-two* recoveries to the statistics of the hospital. They have *now* given *twenty-one* more. Their total of recoveries is, therefore, *seventy-three*, or nearly *four to each person*; and they have gone out of the institution, unquestionably *not* "permanently restored to the class of producers," but most, if not all of them, to return again, and some of them many times, each recording an additional recovery at every time, and thus swelling that crowd of hypothetical or assumed *persons recovered*, upon which rest some of the calculations of deluded statisticians.

Most decidedly the doctor's explanation throws abundant light upon what otherwise, having the aspect of light, would really have been delusive darkness. In the interest of truth it is to be hoped that others will follow his example. And wherever it may be followed, similar results will most certainly be reached,—results alike in character, but differing in degree according to the age, and, to some extent, the situation of the hospital. As a rule, and to the extent of a considerable series of years, the older the hospital, and perhaps the nearer its situation to a large city, the greater will be the number of double, triple, and multiple recoveries of individuals.

DELIRIUM TREMENS IN INSANE HOSPITALS.—It is asserted in the First Study, that "at some of the institutions a number not inconsiderable of recent cases are not cases of insanity proper, but of delirium tremens;" but no attempt was made to illustrate the proposition by any positive statistical information. The assertion might have had the still stronger extension, that a number not inconsiderable of the *recent cases* which flourish as *re-*

coveries in American statistics were cases of sheer and simple drunkenness, without any delirium whatsoever. It is possible that these assertions are more emphatically applicable to the cases at the Bloomingdale Asylum, New York, than to those of any other hospital in the country. Yet there are good reasons for the belief that there are several other institutions the records of which contain large numbers of such cases; and that a liberal sprinkling of them may be found in nearly all.

Nearly thirty years ago I published an analysis of the cases treated at Bloomingdale, from the time of its opening to the close of 1844, a period of twenty-three and a half years. The number of admissions was 2937. In the classification of these cases, no less than 594, or a trifle more than one-fifth of them, were placed under the head of delirium tremens, including the cases of mere habitual drunkenness. It is possible, also, that there were a few whose mental disorder was a little more prolonged than that of delirium tremens, and hence might have been more appropriately classed as the mania of alcoholism. But the number, if any, was small.

These 594 *cases* were furnished by 322 *persons*, many of whom were admitted more than once. These 322 persons (making, by re-admissions, 594 *cases*) furnished 512 *recoveries* to the statistics of the institution.

Thus, in the medical records of the Bloomingdale Asylum, prior to the year 1845, there are 512 recoveries from delirium tremens and ordinary fits of drunkenness, *which still stand in their tables of statistics, as published in their annual reports to the present time, as recoveries from insanity*; and whosoever uses the statistics of that

asylum, as they are published in those reports, to illustrate any question relating to insanity, uses those 512 recoveries from delirium tremens and ordinary inebriety.

Dr. Gray, of the State Asylum at Utica, has for some years reported such cases, not as recovered, but as "not insane."

Dr. A. E. Macdonald, of the New York City Asylum, Ward's Island, reports them in the same way. In his report for 1876, he alludes to those who left the asylum within the year in the following language: "The fifteen discharged as 'not insane' would, in the reports of some asylums, be classified as cases of 'dipsomania,' or 'alcoholic mania,' and used to swell the total of recoveries. I do not so use them, because they were simply drunkards, suffering from the effects of a debauch; and I do not consider them entitled to have the mantle of insanity, and therefore of irresponsibility, thrown over their misdeeds."

Dr. Macdonald evidently believes that drunkenness is a vice, and not a disease.

PROPORTIONATE DECREASE OF RECENT CASES.—Notwithstanding the fact that the advantages of early treatment have been constantly proclaimed in the annual reports of the hospitals, for nearly half a century, there is, to-day, no reason to believe that any larger proportion of the insane of Massachusetts are taken to the hospitals in the acute stages of the disorder than in the earliest years of the history of the hospital at Worcester. Of all the admissions to the public institutions, the *proportion* of recent cases appears indeed to be smaller now than it was at that remote period. This result, however, is apparently to be accounted for by the supposition, not

that fewer recent cases, but that a larger number of old cases, are removed to those institutions. As hospital accommodations have increased, more and more of the large class of the chronic insane, who formerly remained among the people, are thus removed from their homes.

This non-increase of recent cases in the hospitals has in some places been attributed to an increase of prevailing prejudices against those institutions. I cannot regard this hypothesis otherwise than as erroneous. Those prejudices were, in my estimation, as general and as strong forty years ago as now. No hospital in Massachusetts has been more subjected to unjust censure among the people than that at Worcester, when under the care of Dr. Woodward; and no superintendent has had *harder stories*, or, probably, more that were untrue, told of him, in what Dr. Bell, writing upon the subject, in reference to the McLean Asylum, called the "undertow of society."

If prejudices against the institutions have had so potent an effect, and if those prejudices have been increasing, how happens it that, in Massachusetts, although hospital after hospital, in pretty rapid succession, has been erected, yet, as each one was opened, it was soon filled to overflowing, and a little later became crowded, almost *packed*, with inmates, as the three large State hospitals have been during the last two or three years?

ENGLISH ASYLUMS.—Dr. Bucknill would have us believe, and some of our American writers appear to believe, that those prejudices—prejudices suffered in common by all institutions for the insane, the world over—have mostly been overcome in England, through

the beneficent surveillance of the commissioners in lunacy. Be that true, or be it not true, there certainly has been no great rush of recent cases into the hospitals in that country, as a consequence of this asserted improvement in the public estimation of them. On the contrary, we find the same process of increase of chronic cases admitted, going on in the institutions of our fatherland as in our own.

In his report for 1876 of the Derbyshire Lunatic Asylum, Dr. J. Murray Lindsay uses the following language: "The admissions of the past year have been of a still more unfavorable class than usual, both as regards their physical condition, mental state, and duration of insanity. . . . Instead of the asylum being looked upon as a hospital, to which patients laboring under mental aberration should be sent in the earliest stages of their malady, there appears to be an increasing tendency to detain them at home, and to delay sending them to the asylum until every resource has failed, and then to the asylum as the last refuge."

Dr. Samuel Mitchell, superintendent of the South Yorkshire Asylum, informs us, in his report for 1874, that of 363 patients admitted within the year, "only a small number were brought suffering from insanity in its earlier stages; on the contrary, they arrived here showing all the symptoms of the disease in its most advanced and incurable forms." . . . "So earnest," says he, "in many cases, is the endeavor on the part of their friends to keep at their homes patients suffering from mental diseases, that it is quite the exception ever to receive into the asylum a patient in the early stages of general paralysis,—a form of mental alienation in

which the sufferer usually becomes so troublesome as to require constant supervision in its earlier manifestations."

The condition of things is much the same in Wiltshire. Dr. J. Wilkie Burman, in his report for 1873, says, "I regret to have to state that the admissions continue to be of a very unfavorable nature, as to prognosis and prospect of recovery, in a large proportion of the cases." And in his report for 1875 it is asserted that "in only fifty-five out of the one hundred and thirty cases admitted during the year, was there the slightest reason to entertain hopes of recovery; and, of these, twenty-three have been discharged recovered, four have died, and the rest remain, in only a few of whose cases is any improvement expected."

Dr. James Sherlock, of the Worcester Asylum, testifies strongly in the same direction, in his report for 1874. "The cases received," says he, "have for several years past been of an eminently unfavorable class. It is remarkable how few cases of recent acute mania and melancholia are passed to our care from year to year; but the number of those who gradually subside into an irresponsible, unmanageable, and insane state continues unabated." . . . "It is probable that now, at the end of the twenty-second year of the existence of your asylum, there are not received, from year to year, more recent acute cases than were consigned to it in the earlier years of its establishment; but the number of patients whose insanity has been gradually developed from defect of diagnosis, and by the lapse of proper preventive means, has largely increased. Many such of the latter class are now regularly sent here, but not

at a date sufficiently early to insure recovery, or even improvement."

Dr. T. Algernon Chapman, of the Hereford Asylum, in an interesting article in the *Journal of Mental Science* for July, 1877, says, "It remains a great fact that a mass of incurable cases are being forced into our county asylums." He maintains, however, that a very large proportion of them were *never* curable; that they are "cases of gradually progressive insanity," or of "incurable brain-disease," or of senile insanity, idiocy, and epilepsy.

From Wales, which is within the jurisdiction of the English Commission in Lunacy, we have the testimony of Dr. G. J. Hearder, who, in the report for 1874 of the Carmarthen Asylum, wrote as follows:

"It is a most lamentable fact, that for every case sent here for treatment, while treatment will avail, three cases are allowed to sink, by continued neglect, into a state of utter hopelessness."

If, then, in England, where so many institutions have existed for so long a time; where the population is almost stationary, in regard to residence, as compared with the migratory people of this country; where all branches of the civil service of the national, the county, and the municipal governments are, and long have been, so perfectly organized and so efficient in administration, and where a commission in lunacy has exercised a watchful supervision during a period of more than thirty years,—if, under these circumstances, it has there been impossible to increase the proportion of curables received at the hospitals, to induce the relatives or guardians of those who become insane to take them in

the early stages of the disease to the curative institutions, and to prevent, by curing these recent cases, the increase of the number of the insane, how can it be expected that those objects should have been accomplished in this country?

SUPPOSED CAUSES OF DELAY.—It has long appeared to me that he who seeks the true causes of delay in the removal of the insane to the institutions provided for them, must look to social life, to the homes and the relatives of the persons who are proper subjects for the ministrations of those institutions; and I have recently met, in a foreign report, views so nearly coincident with my own, that I here reproduce them.

“The recourse to asylum treatment,” says Dr. James C. Howden, in his report for 1875 of the Montrose Asylum, Scotland, “may be assumed in every case to be a matter of social convenience. In recent cases, of course, the probability of recovery to a certain extent influences relatives; but in far the greater number of instances the exigencies of the situation settle the point, and the patient is sent to the asylum because he cannot be conveniently kept at home.”

But what are the motives for such delay? They are various: motives of affection, motives of economy, and not infrequently motives of pride. Hence, how much soever institutions may be improved, or to what extent soever prevailing prejudices in regard to them may be overcome,—and I have little faith that there will be much change in that respect,—it is very doubtful that the insane, as a whole, will ever be placed under hospital treatment at a much earlier period of their disease than they are at the present time.

DR. MITCHELL'S ESSAY.—The *Journal of Mental Science*, in its issue for January, 1877, contains an article by Dr. Arthur Mitchell, one of the Commissioners in Lunacy for Scotland, which is the most valuable original statistical contribution to our knowledge of the actual curability of insanity, as first recognized at public institutions, that has appeared in many years. As Commissioner in Lunacy, Dr. Mitchell has at hand all the statistics of all the institutions for the insane in Scotland. Hence, if a patient is discharged from one asylum, and, either immediately or at some subsequent period, is received into another, he is informed of it. In this way every patient admitted to any asylum may be afterwards followed, so long as he remains in any public institution in the country, no matter how frequent the changes may be.

The object of Dr. Mitchell's article was this: to take all the persons admitted for the first time into all the Scottish asylums, in a given year, and, twelve years afterwards, to show what had become of them, and what was their mental condition, if living, or, if dead, at the time of death.

The most important of the statistics of the article are as follows: .

The number of patients (in this instance, *persons*) admitted in the year 1858, was 1297. Twelve years afterward, in 1870, it was found that 412 of them had already died in the asylums, and 273 remained in them. Thus 685, insane at death, or still insane, are accounted for. The remaining 612 had disappeared; but the history of 411 of them was successfully traced.

42 of them had died insane.

94 were living, and insane.

Total, 136 insane.

78 had died *not* insane.

197 were living, and *not* insane.

Total, 275 *not* insane.

Hence, of 1096 persons whose history was traced, 454 had died insane, and 367 still lived, insane. Total, 821 insane. And 78 had died *not* insane, and 197 still lived, *not* insane. Total, 275, *not* insane. Percentage of insane, 74.91—; percentage *not* insane, 25.09+. In general terms, three-fourths were insane, and one-fourth not insane.

On the assumption that, of the 612 who had disappeared from the asylums, the results of the 411 whose history was traced were equally true of the 201 whose history had not been traced, Dr. Mitchell, in a foot-note, gives the general results in regard to the whole of the 1297 persons. In *proportions* these results are as follows:

Dead, insane at the time of death . . .	36.6 per cent.
Alive and insane	31.7 “ “
Alive and sane, or sane at death . . .	31.7 “ “

Good as Dr. Mitchell's paper is, let it not be forgotten that it does not give *final* results, except in the cases of the dead. Of the 197 persons *known* to be still living and not insane, and the 97 who, of the untraced 201, are

assumed to be living and not insane, it is very likely that a not unimportant number will yet return to the asylums, and die there. Making due allowance for these, it is quite apparent that the *final* results, in regard to these 1297 persons, will approximate closely to the final results in the cases of 244 persons, as shown in the best and most reliable of all essays upon the subject in the English language,—best and most reliable simply and only because its results *are* final. The essay alluded to is that of which the general statistics are given below.

DR. THURNAM'S INVESTIGATION.—Dr. Thurnam traced the history, until death, of 244 persons treated at the Friends' Retreat, near York, England, and obtained these results:

Died insane during first attack	113
Recovered from first attack	131
	— 244
Recovery permanent (of the 131), died sane .	45
Had subsequent attack	86
	— 131
Died insane (of the 86)	66
Recovered, and died sane	20
	— 86

Generalizing from these data, he formulated the rule* of curability quoted in Study First, page 60.

* In the fourth edition of their treatise on Psychological Medicine, page 131, Drs. Bucknill and Tuke say, in regard to the rule referred to, "It would be more strictly correct to say, of eleven persons attacked by insanity, six recover, and five die sooner or later during the attack. Of the six who recover, not

All of the original statistics of all the American institutions for the insane, wherever, whenever, and in what manner or form soever published, are of less value in determining the question of the curability of the insane, at the time when they first enter the hospitals, than the two papers of Dr. Mitchell and Dr. Thurnam. The conclusions of the latter, although before the profession for a generation, have very rarely been quoted; but, in their stead, the public have been almost constantly entertained by the now essentially traditional assertion, "from eighty to ninety per cent." (or something like it) "can be cured,"—assertions which, in the language of Dr. Bates, published almost thirty years ago, "are received with wondrous admiration by that portion of the public who are better pleased with marvellous fiction than with homely truth."

"To this complexion *have* we come at last;" and neither physicians, nor humanitarians, nor political economists, nor other scientists, need longer lay the flattering unction to their souls, that even forty, and much less fifty, sixty, seventy, or seventy-five per cent. of insane persons, as they first appear at the hospitals, can be permanently cured and restored to the class of producers. They will be obliged to look the problem of insanity and the insane fairly and squarely in the face, in the aspect under which it is here represented; for though they build, as a hospital for the insane, a temple costly as that of Solomon, or a tower like that of the plain of

more than two remain well during the rest of their lives; the other four sustain subsequent attacks, during which at least three of them die."

Shinar, upon the highest hilltop of every county in the land, they will not essentially alter it.

There is a time for everything. That the time had fully come in which a new review, in this country, of the subject of the curability of mental disorders was specially important, there are many evidences. Not the least of these was the situation of general statisticians, who, impressed with the belief that "from seventy-five to ninety per cent." of the insane are susceptible of cure, were floundering in the dark, and vainly endeavoring to explain the rapid increase of the number of those mental invalids among the people. In this, and in other connate questions, a vast amount of time, labor, pens, ink, and paper has been wasted by authors and printers: worse than wasted, because the deductions, conclusions, or supposed demonstrations, so far from being the essence of truth, were oftentimes among the most egregious of errors.

Among the many persons who have expressed their satisfaction with the First Study is Dr. Nathan Allen, of Lowell, whose statistical and other works, upon various important subjects, have deservedly given him a European, as well as an American, reputation.

"Please accept," he writes, "my thanks for your valuable paper upon the Curability of Insanity. To what extent this disease can be or is actually cured, there has been a wide difference of opinion, as you well know, even among expert writers on the subject. Your facts, statistics, and conclusions must go far to settle this question, that the percentage of cures has been rated altogether too high.

"Had your paper been placed in my hands many

years ago, it would have saved me much labor and trouble."

It is a consolation to believe that many other writers could truthfully make the same acknowledgment as that expressed in Dr. Allen's closing paragraph.

"I have just read your report," writes an active member of the board of charities of a distant State, "and cannot refrain from writing a few lines to express my *great* satisfaction with your most valuable discussion of the curability of insanity."

An eminent physician, a professor in a medical school in another and remote State, says, "Your chapter on the curability of insanity is most instructive and full of interest. If the misstatements of general practice could be illumined by the same light which you have thrown upon your special labor, there would be more ground for hope of a useful and honorable future for medicine."

Another physician, well known for his interest and his labors in the broad field of science which includes the great questions of public welfare, writes as follows :

"Your statement of the curability of insanity, and your analysis of the reported cures of insanity in asylums, is, in my opinion, a valuable public service. When the public learn that asylum superintendents desire to state the truth, and not merely to communicate what information they—the superintendents—think it is best for the public to know, popular distrust of asylums will cease."

Let not the reader too hastily infer, from the last sentence of this extract, that there is a conspiracy among the superintendents, the object of which is to mislead public opinion in regard to the subject under discussion.

Letters of approval have reached me from a no inconsiderable number of those superintendents. One of them, who is well and widely known as the successful chief officer of one of the largest State institutions, thus expresses his views:

"I write to satisfy an impulse that has had possession of me for some time; and that is, to say how much gratified I was with your last report, and your article on the curability of insanity. You are undoubtedly right in the views expressed as to the unreliability of the cures reported by almost all the hospitals. If all the statistics were sifted as thoroughly as you have sifted a few of them, I am afraid the percentage of cures would prove exceedingly small."

Another, who has likewise long presided over a large State hospital, writes as follows: "Accept my thanks for your argument and conclusions in relation to the curability of insanity. I had arrived at the same figures, but have been not a little embarrassed by the statistics of others. The matter is clear now."

"It has been a wonder to me," writes a third, equally well known as the efficient head of still another among the largest State institutions, "that members of the profession have not spoken as plainly before now, as you have done."

It might not inappropriately be asked, Why has he not done it himself? He is abundantly able to grapple with the subject, but his memory does not reach so far into the past as that of some other persons; and peradventure his facilities for reference to the earlier reports are less extensive.

"I am very much pleased with your report," writes

an ex-superintendent of yet another of the large State hospitals. "Your exposure of some practices and fallacies was eminently proper."

No one of the institutions above mentioned is in New England; and no two of them are in the same State. No person, indeed, who has been quoted, with the single exception of Dr. Allen, resides easterly from the Hudson River, and some of them are far west of it. In regard to the superintendents of hospitals in the six Eastern States, it is sufficient to say that the paper was read at a meeting of the New England Psychological Society, when six of them—five beside the writer—were present, and that, by a unanimous vote, they directed that it be printed.

STUDY THIRD.

(WRITTEN IN 1878.)

WITH a knowledge of the contents of the foregoing Studies, it may well be considered a matter of surprise that some method has not been adopted at the hospitals of so reporting recoveries that the reader may clearly understand how many of them are from first attacks and how many from attacks subsequent to the first. I consider this remark as more applicable to the British hospitals than to those of the United States, both because, as a whole, they are the older, and because the science of statistics has been brought to a greater perfection in that country than in this. Nearly all of those foreign hospitals very carefully discriminate, in their tables of admissions, between *first* admissions and *re*-admissions. Wherefore are they not equally careful, in their tables of recoveries, to discriminate between *first* recoveries and *re*-recoveries? The utility of their statistics would be quite as much increased by the latter course as by the former. In England and Wales, from 1859 to 1874 inclusive, the stated recoveries in all hospitals and asylums for the insane were 34.01 per cent. of the *admissions*. This result, as showing the curability of *cases*, or *attacks*, has its value; but, when the relation of insanity to all other subjects of human

interest is taken into consideration, would it not have been *more* valuable to know what percentage of the *persons* recovered?

I turn, however, from this subject to the consideration of the question, *Are recoveries from insanity in a direct ratio to the cost of treatment?* The proposition involved in this interrogation would not be devoid of interest at any time; but at this juncture, after the experience of the last few years in greatly increasing the cost of hospitals, under a vague impression that recoveries from insanity will always be in direct ratio to the sum of pecuniary expense bestowed upon the patients, it becomes a matter of absolute importance.

That degree of bodily comfort which is necessarily included in the best attainable hygienic conditions—pure air, cleanliness of person and surroundings, sufficient wholesome and nutritious food, a proper amount of exercise, and protection from the inclemencies of the weather—is doubtless essential to the attainment of the greatest probability of cure; but it is quite doubtful that, beyond this attainment, the lavishing of money, however profusely, in mere luxuries, is of any benefit. And yet there are many persons who appear to think that it is, and who measure their hope of recovery by the sum of money expended. To such an extent, indeed, is this notion sometimes carried in practice, that the very object of treatment is apparently thereby defeated, and recovery is prevented instead of secured.

There are no statistics by which either the affirmative or the negative of our proposition can be positively demonstrated; but there are some which offer an interesting study when considered in relation to it, and, so

far as they go, would seem to prove that increase of expenditure does not enlarge the proportion of cures. I allude particularly to the statistics of the McLean Asylum at Somerville, Massachusetts, one of the oldest corporate institutions for the insane in the United States. In 1840 that asylum was under the medical care of Dr. Luther V. Bell. In the course of that year one hundred and fifty-five patients were admitted, and the reported recoveries were seventy-five, which is equal to 48.38 per cent. of the admissions. The average weekly cost of support of the patients was, for that year, three dollars and fourteen cents each: in other words, when paying three dollars and fourteen cents each per week, forty-eight patients in the hundred recovered.

Thenceforward, although with some fluctuation from year to year, there was, upon the whole, a gradual increase in the current expenses of the institution, until, in 1875, the average weekly cost for each patient was twenty-one dollars and seven cents. The increase of cost during the period of thirty-five years was 671 per cent., or a small fraction less than sevenfold. In the course of that period, the Appleton Wards, which for luxurious accommodation will not suffer by comparison with the best in Europe, were erected, as well as the two buildings for refractory patients, which, so far as I am informed, are unequalled in elegance by any others for that class in the world.

With these additional elegancies of accommodation, and a nearly sevenfold augmentation of current expense, what was the condition of things in regard to recoveries? Were *they* increased, not, indeed, seven, nor six, nor five, nor even three fold, for that would

have been impossible; but were they doubled? Alas, no! They had *diminished sixty-one per cent.* of the ratio in 1840; so that, instead of *forty-eight* (48.38) recoveries to the hundred admissions, there were only *nineteen* (18.82). The number of patients admitted in 1875, the closing year of the period, was eighty-five, and the number of recoveries sixteen, equal to 18.82 per cent.

The following table has been prepared in justification of the foregoing assertions. Beginning with the year 1840, it was intended to present the results of every fifth year subsequently, until 1875. The reports, however, of several of those years were not readily accessible, and consequently the available years most nearly approaching those fifth years were taken. The years 1876 and 1877 were added to show that the diminished proportion of recoveries was not a temporary incident.

DATE.	Admitted.	Recovered.	Daily Average	Whole Cost.	Weekly Cost per Capita.	Per Cent. of Recoveries.
1840.....	155	75	128	\$20,919.63	\$3.14	48.38
1846.....	148	65	164	32,892.00	3.85	43.92
1848.....	143	82	171	33,130.09	3.70	57.34
1854.....	120	59	195	46,724.31	4.61	49.16
1855.....	123	56	192	60,867.26	6.09	45.53
1859.....	131	61	185	59,478.92	6.16 $\frac{1}{2}$ *	46.56
1861.....	111	54	193	63,311.87	6.30	48.65
1865.....	82	38	186	120,885.84	12.50	46.34
1870.....	79	33	187	134,339.63	13.81	41.77
1872.....	93	15	173	152,327.60	16.50*	16.13
1875.....	85	16	151	165,660.47	21.07*	18.82
1876.....	92	18	160	164,973.80	19.72*	19.56
1877.....	110	15	175	143,148.94	15.66*	13.63

* These five sums are copied from the reports. As derived from the figures in the two next preceding columns of the table, they should be, beginning at the upper one, \$6.18, \$16.93, \$21.09, \$19.82, and \$15.73, according to our calculation.

For the purpose of comparison with this certainly very remarkable history of the results of treatment at the oldest institution in Massachusetts,—an institution always ably conducted, and never stinted in its pecuniary resources,—I select some no less remarkable statistics which have recently been received. The comparison reveals a contrast so notable, that one may well exclaim,—

“Look *there* upon *that* picture and on this.”

The *Journal of Mental Science* for January, 1878, contains a review of the first report of Dr. F. W. Skae, who has recently been appointed inspector of the asylums for the insane in the Colony of New Zealand. From this we learn that within that infant colony there are already no less than eight asylums, containing a total of 783 patients. The largest has 235, and the smallest, 4. There is “one insane person in asylums to every 509 of the population;” but from defects of structure, or other objectionable features, those asylums furnish “satisfactory accommodation” for only 270 patients, although occupied, as above stated, by 783. All of these receptacles are “utterly deficient” in land, and their superintendents are not medical men. Of one of them, Dr. Skae says, “The condition of the patients, generally speaking, is deplorable. The great majority of them are simply prisoners, who are not, and in the present circumstances of the asylum cannot be, subjected to any system of treatment, curative or palliative. They have neither occupation nor amusement.” Of another,—“parts of which (he thinks) were expressly constructed conformably to the ‘wild beast theory of insanity,’”—he describes one room as “a cell, remote

from supervision, badly lighted by a small barred window near the roof, having a sloping floor, with a drain to carry off urine, and furnished with a fixed privy, and a straw bag for a bed, and having a slit in the wall through which food can be pushed."

These partial descriptions are here quoted for the purpose of emphasizing the results obtained in those asylums. "The ratio of recoveries to admissions," writes Dr. Skae, "*is 13 per cent. higher than in the Scotch and Irish asylums, and 23 per cent. higher than in English county and borough asylums.*" "Their death-rate," remarks the reviewer, "was 6.70 per cent. on the average number resident, and 4.49 per cent. on the total number under treatment, being *about 4.50 per cent. lower than in England.*"

It is no cause for marvel that the reviewer, in reproducing these statistics of recovery and mortality, says, "Here are facts for our pessimists." Yea, verily! and it would be interesting to know what the *optimists* have to say about them. If within those rude colonial receptacles, over-crowded, and, in some portions, of a "quite disgusting description;" where, in the patients' rooms, they have sloping floors, "with a drain to carry off urine;" where the patients "have neither occupation nor amusement," and are not "subjected to any system of treatment, curative or palliative,"—if, in these places, the proportion of recoveries is so much larger, and the proportion of deaths so much smaller, than in the asylums of Great Britain, in which are found all the appliances of the most recent science, and all the comforts suggested by an enlightened humanity, is it not—let it be asked in sorrow,—is it not high time, so

far as results are concerned, for all of us to stop talking of the great improvements in the treatment of insanity, and for the people of some parts of this country to ask for the *quid pro quo* for the money which has been poured like a deluge upon some of the recently-erected hospitals for the insane?

DISAGREEMENT OF DOCTORS.—In the First Study mention is made of the fact that each person has his own standard of insanity, and that this standard depends, to a great extent, upon the constitution and the temperament of the individual; and a remarkable illustration of the difference of this standard in different persons, as exhibited in the reported cures of a hospital for the insane, was there presented. A still more impressive exhibition of it is seen in the foregoing statistics of the McLean Asylum, where, as will soon be perceived, this constitutional characteristic will, in large measure, explain the *diminution* of reported recoveries, although it may *not* account for the non-increase of recoveries under the enormously enlarged disbursement of money.

Dr. Bell's proportion of recoveries, in 1840, was forty-eight (48.38) in the hundred. There was no great reduction of this proportion during the lapse of a generation. Even as late as 1867 the reported recoveries were as high as fifty (50.56), and in 1869 almost forty-two (41.77), in the hundred. The asylum was then under the superintendence of Dr. Tyler. In March, 1871, Dr. Tyler resigned, and was soon succeeded by Dr. Jelly. The statistics of admissions and recoveries at the asylum during the last seven years of the administration of the former, and the

first seven years of that of the latter, are shown in the subjoined table:

FIRST PERIOD.				SECOND PERIOD.			
YEAR.	Admissions.	Recoveries.	Per Cent. of Recoveries.	YEAR.	Admissions.	Recoveries.	Per Cent. of Recoveries.
1864.....	101	42	41.48	1871.....	75	21	28.00
1865.....	82	38	46.34	1872.....	93	15	16.13
1866.....	103	46	44.66	1873.....	92	19	20.65
1867.....	89	45	50.56	1874.....	75	20	26.66
1868.....	92	34	36.95	1875.....	85	16	18.82
1869.....	108	51	47.22	1876.....	92	18	19.56
1870.....	79	33	41.77	1877.....	110	15	13.63
Totals and Average.	654	289	44.19—	Totals and Average.	622	124	19.94—

The number of patients admitted (654) in the course of the first period was only thirty-two larger than that of the second period (622); but the number of recoveries (289) was *more than twice as great*. The percentage of recoveries in the first period was 44.19—, and, in the last, only 19.94—: in other words, the *proportion* of recoveries of the first period was to the *proportion* of recoveries of the last period as 221 to 100, or as 100 to 45.24. It is impossible that, just at this juncture (1871), there was, in the character of the malady under which the persons received at the McLean Asylum were suffering, any sudden alteration sufficient to explain this remarkable discrepancy in results. There is, indeed, so far as appears, no reason for a belief that there was *any* such alteration. Furthermore, no man who has experience in the treatment of the disease, and who is acquainted with the superintendents of the two periods, would think of attributing the discrepancy in recoveries

to a difference in the medical sagacity and skill of those superintendents.

Under the circumstances of the case, our only resource for an explanation of the surprising difference in the proportion of reported recoveries is the "personal equation," or the diversity of characteristics in the constitution and temperament of the reporters. If this explanation be the true one, it necessarily follows that we must believe, that if a certain number of persons who have been insane and subjected to treatment be placed before two men equally competent for judgment, for a decision in regard to their mental condition, one of those men may adjudge recovery to *two hundred and twenty-one of them*, while the other will adjudge it to only *one hundred*.

One of the obvious consequences of this state of things is, that it is impossible to form an accurate opinion of the comparative merits of different institutions for the insane from the recoveries at them respectively, as set forth in the annual reports.

Although frequently done, it is absurd, at any time, to compare the recoveries at a private or corporate institution at which epileptics, paralytics, imbeciles, and some other classes are never received, with those at a State institution which is compelled to admit all classes, and attempt, from this comparison, to judge of those institutions in respect to general excellence, or adaptation to the purpose to which they are devoted. The restricted and the unrestricted cannot justly be compared: they may more properly be contrasted.

But, even in regard to institutions precisely alike in respect to the reception of patients, it has been shown

that men differ so widely in their estimate of what constitutes *recovery*, that it is the sheerest folly to base an opinion of comparative merit upon the alleged recoveries; for although, at the hospital A and the hospital B, the actual amount of improvement in the mental condition of the patients may be precisely equal, yet the superintendent of A *may* report twice as many recoveries as the superintendent of B.

SUPPORTERS.—Inasmuch as all that is contained in the foregoing Studies was written under a strong conviction that I was developing an important truth, a truth which would become the corrective of a prevalent, most glaring error; and inasmuch as all the elements of the argument have been drawn from the reports of asylums and hospitals, and the other works of authors who have written upon the subject, I have neither doubted the propriety and utility of the work, nor feared, in the least, that the argument could be overthrown, or its conclusions disproved. The facts embodied in those conclusions are, however, so different from that which, in this country, had almost universally been accepted as truth for nearly half a century, that I must confess to an impression that I should stand comparatively alone, with but few who were prepared to agree with me, and fewer still to extend their support. It is a source of great satisfaction that this impression has been proven to be false. The Second Study contains extracts from approbative letters received from physicians and other persons interested in the subject. It is proposed here to add a few others, as illustrations of the spirit in which the essays have been received.

A physician never connected with an institution for

the insane, but who is thoroughly conversant with the literature of the disease, and who is himself a somewhat prolific author upon the subject, writes as follows :

“ It had not escaped my notice that the large number of reported cases of recovery in the annual reports of the insane hospitals throughout the country were inconsistent with the apparently rapid increase in the number of the insane,—an increase out of all proportion to that of the population, and for which there seemed to be no good reason, if this large proportion of cures were permanent ones ; but your demonstration, that the actual permanent cures do not exceed twenty-five or twenty-six per cent., is none the less startling because it explains the difficulty to which I have alluded. It is a sad comment on the progress of medical science in the art of healing, that we can as yet cure but one-fourth of the cases of insanity. I doubt if the proportion is much larger than it was at Gheel, in the days when the legend of the interposition of St. Dymphna was fully believed, or when the monks of the Pyrenees relied upon the restoring effects of pure air and perfect quiet. I have no doubt of the truth of your deductions, and might plead, in extenuation, that insanity in America is more violent and unmanageable than in Europe (which I doubt not is true), but for the fact that your best statistics are from English and Scottish sources.”

Another physician, probably not so deeply read upon the subject as the author of the foregoing extract, but who, in an article relating to insanity written within the last year, had asserted that seventy per cent. of recent cases can be cured, makes the following evidently sincere avowal :

"Allow me to thank you for your monograph on the Curability of Insanity. I must acknowledge myself to have held an erroneous idea concerning the percentage of cures. Your exposition lays bare a glaring self-deception on the part of many, myself included. I am truly thankful to have been undeceived."

A gentleman of broad culture, not a physician, but much interested in the subject of insanity, and for some years a member of the board of trustees of a large State hospital for the insane, says,—

"Allow me to thank you for continued remembrance in sending your Twenty-second Report,* received yesterday. I have read it this afternoon, and am greatly pleased with its truthful, fearless spirit. Your statistics and quotations are opening the eyes of those interested in the subject of insanity. If they *are* depressing to those who carry any portion of responsibility in care for the insane, it is the fault of the dire facts, and is not yours."

Thus far for voices from this side of the Atlantic. Let us turn to some of those from Great Britain. And here it may be remarked, that, were this little work intended for physicians alone, the mere names of the authors of the remaining extracts would be their sufficient recommendation; but since its circulation will be, to a considerable extent, among non-professional men, and members of other professions than that of medicine, some mention of their positions will not be out of place.

What says England, as represented by Dr. Daniel Hack Tuke, joint author with Dr. Bucknill of "The

* Containing Study Second.

Manual of Psychological Medicine," *the* standard general treatise upon insanity for all English-speaking people?—

"I ought to have expressed my obligations before for the pamphlet on 'The Curability of Insanity,'* which I have read with much interest. It is a valuable addition to our literature, and *such a setting forth of the subject has been long required*; but it is an unpleasant task to do anything which even seems to render the curability of insanity less hopeful than it is."

And the new edition of the aforesaid manual contains the following paragraph:

"The fallacy of taking the recoveries of *cases*, instead of *persons*, has been ably insisted upon and illustrated by Dr. Earle, in a pamphlet on 'The Curability of Insanity,' which is deserving of serious study by the superintendents of asylums in Britain as well as in the States."

The next extract is from Scotland. A few short weeks ago it might have been presented as a voice from the living; but it now, unhappily for humanity, comes as a voice from the dead. It is from Sir James Coxe, a man of great eminence in the medical profession, for many years a deeply interested and active member of the Scottish Board in Lunacy, and the author of several monographs upon insanity:

"I have read it with much interest, and regard it as a most valuable contribution to the statistics of insanity. It cannot fail to exercise a powerful influence in neutralizing that spirit of inflation, which, I am sorry to think,

* Study First.

is a too prevalent characteristic of writers on this branch of medicine. The merits of superintendents of asylums are already sufficiently great, without the adventitious glory of questionable success."

In conclusion comes another Scottish authority, of no less eminence than that which next precedes. It is that of Dr. W. A. F. Browne, long known as the eminently successful superintendent of the Crichton Royal Asylum at Dumfries, and subsequently as a member of the Commission in Lunacy, and for a generation of years as one of the ablest of writers upon psychological subjects :

"Although I differ from you upon one aspect of the subject of your paper, which may, to a considerable extent, be accepted as an exposition of the '*Incurability of Insanity*,' I regard your argument as most lucid and logical, and as presenting the matter treated of in a new and most striking light.

"I entirely concur with you, that the ratio of curability has depended, and will continue to depend, upon the standard created by the mental constitution of each superintendent, unless, indeed, an extern expert be called in to adjudicate in each case.

"I have always demurred as to the accuracy of both Burrows and Woodward, even after giving credit for all the advantages and deductions which were claimed ; but I was more than staggered by the practice which you reveal, and most properly denounce, of calculating the proportion of cures on the discharges ; although I almost rejoiced over the explanation thus afforded of the ninety per cent., hundred per cent., etc., of cures, which seemed to attend your labors in America, and which

excited the envy and despair of my *confrères* and of myself. I am not aware that this mode of estimating success has found imitators with us.

"The process by which you eliminate the numerical truth, by taking five years at different periods of what may be called an asylum curriculum, is, to my mind, demonstrative, and brings out nearly the figures to which we in England are now accustomed.

"Your conclusions appear to me, upon the whole, impregnable.

"Where I venture to differ from you is, that we must continue to calculate upon *cases*, and not *persons*.

"Permit me, after this bold attempt to criticise, to express my unqualified approbation of your disquisition."

Those portions of the foregoing extracts which are here printed in italics were not emphasized in the originals.

After the assertion that "we must continue to calculate (recoveries) upon *cases*, and not *persons*," Dr. Browne proceeds to give his reasons therefor. Those reasons are cogent and convincing; but the doctor mistakes my position. Nowhere in my essay is it asserted that the calculation of recoveries should *not* be made upon *cases*. *I have always pursued that method, and I do not perceive in what way it can be avoided.* All that I have insisted on is, that the reports of recoveries shall be accompanied by *an explanation* by which the reader can learn whether those recoveries are from first attacks, or from attacks varying from the second to the thirtieth, the fortieth, or the fiftieth; whether, if you report ten recoveries, it is to be understood that ten different per-

sons have really recovered, or merely that one person has recovered from ten successive attacks. *The inability to convey this information is the grand fault in the general method of reporting, and by this fault public opinion has been grossly misled.*

This subject very naturally leads to what follows.

The subjoined preamble and resolutions are sufficient proof that a no inconsiderable part of the physicians engaged in the specialty not only perceive the imperfection of the general method of reporting recoveries, but are prepared so to alter that method as to avoid such errors in the future. They were introduced by the present writer, and adopted, in December last (1877), by the New England Psychological Society, an association of the superintendents of the regularly organized institutions for the insane in the States east of the Hudson River :

“WHEREAS, The method generally heretofore pursued in reporting the recoveries of patients at the institutions for the insane, by its avoidance of a definite statement of the repeated recoveries of the same person in cases of periodical or recurrent insanity, has been largely instrumental in imparting to the general reader, and particularly to persons outside of the profession who are specially interested in the subject, an erroneous opinion of the curability of persons afflicted with mental disorder; and

“WHEREAS, As a result of that erroneous opinion, computations have been made in political and social economy, based upon an assumed proportion of curables among the insane, which is evidently far too large; and

“WHEREAS, The attainment of truth, and not the dissemination of error, is the true object of all statistical science: therefore

“*Resolved*, That, in the preparation of published reports, this Society recommends the adoption of some method by which that erroneous opinion may be corrected, and in the future prevented.

“*Resolved*, That, without prescribing or suggesting a definite formula, it is recommended that a clear exposition should be made of the facts in relation to the following points:

“1st, *In regard to patients admitted in the course of the year*: the number admitted for the first time, and the number of re-admissions, specifying the number who have been received twice, thrice, four, and any greater number of times, and also the number who had previously been discharged *recovered*; specifying, likewise, the number who had recovered once, twice, thrice, and any greater number of times.

“2d, *In regard to patients discharged in the course of the year*: the whole number of recoveries, specifying the number of those who recovered for the first time, as well as of those who recovered for the second, the third, the fourth, the fifth, and any time still higher in the scale of numbers.

“*Resolved*, Furthermore, that the true import and value of the statistics of any institution for the insane can be attained in no way other than by an analysis of the results, in which are shown, not alone the number of persons who recovered once, but the number of those same persons who recovered twice, thrice, four, five, or any higher number of times; and that any collection

of statistics which has not been subjected to such an analysis is of comparatively little value."

It appears to me that these resolutions constitute a step in advance in the right direction.

THE VERMONT REPORT.—As this article is in course of preparation I receive a copy of the report of the Vermont Asylum for the two years ending July 31, 1878. As I open it to the section on Recoveries, I find that, with "the courage of his convictions," Dr. Draper gives the explanation called for in the foregoing resolutions.

For the first time in the forty years of the existence of that institution is the reader of its reports enabled to obtain that understanding of the results of treatment, without which no accurate opinion of the importance of those results—as viewed in relation to the disease, or to either medical, political, or social science—can by any possibility be formed.

"Of the number discharged," says the report, "fifty-two—thirty-six men and sixteen women—recovered. This is a fraction over 31 per cent. of the number admitted. Of these, twenty-eight recovered from a first attack, nine from a second, three from a third, four from a fourth, two from a fifth, two from a sixth, one from a seventh, one from a tenth, one from a fourteenth, and one from a fifteenth."

What a flood of light the third sentence of this paragraph throws upon the first! and not upon that alone, but upon the medical history of the hospital from the time of its origin. Of the fifty-two recoveries only twenty-eight, or two more than one-half, were from the first attack. The remaining twenty-four were of pa-

tients who had previously left the hospital "recovered" from one to fourteen times each. Those twenty-four persons, as will be perceived by a brief computation, have given *one hundred and eleven recoveries* to the statistics of insanity, and it is not at all improbable that they will yet give as many more. It is very certain that their future contributions will be large.

Thus we have another evidence of the truth, that wherever and whenever light is permitted to break in upon the darkness of the statistics, in gross, of the institutions for the insane, the revelation comes forth, that a large proportion of the recoveries—and the older the institution the larger is the proportion—are merely the expressions of *intermissions in the disease* of a comparatively few persons who pass their lives in oscillating between their homes and the hospitals. And once more are we impressed with the folly of any attempt to illustrate any important subject by the crude, *unanalyzed* statistics of the hospitals, or to deduce from them any conclusion or opinion relative to any of the great social problems of the day.

DR. LUTHER V. BELL'S PREDICTION.—It will be recollected that, whatsoever might have been the incentives to the production of the essay upon the curability of insanity, one of the objects gained by it was the justification of an asylum in a neighboring State against an attack from a prominent officer of the government of that State, one of whose condemnatory allegations was, that the proportion of recoveries in these latter years has been less than in the earlier history of that asylum. And, in view of said allegation, it was written in that essay, "The declarations of the earlier superintendents

are returning, like boomerangs, to spend their ultimate force upon their promulgators, or . . . upon the persons now standing in the places of their promulgators.”*

This was written without any knowledge, or, at least, any recollection—for I must have read it thirty-seven years ago—of a paragraph in one of Dr. Luther V. Bell's reports of the McLean Asylum, published at the time (1841) in which there was a general rivalry among the superintendents for the production of the highest proportion of recoveries, and but two years prior to the announcement at the hospital at Columbus, Ohio, that the per cent. of recoveries on all recent cases discharged at that institution in the course of the preceding year was *one hundred*.

“As things now are progressing,” wrote Dr. Bell, “there is infinite danger that the public mind may arrive at such views and expectations as to the curability of insanity as will eventually react most unfavorably on our successors in these holy though arduous avocations, if not upon ourselves.”

The danger foreseen by that sagacious observer was not averted, and the identical form of public opinion which he feared was eventually produced. It is due to the memory of the very able and amiable prophet that his prophecy should be remembered.

* See *ante*, page 62.

STUDY FOURTH.

(WRITTEN IN 1879.)

WITHIN the last three years, several superintendents have begun to give such explanations of the recoveries reported by them as may prevent the false inference in regard to *persons* heretofore alluded to, and consequently act as correctives of the erroneous public opinion. These explanations have revealed a state of things which shows that it is no cause for marvel that the public mind has been deceived upon the subject. For example, at the New Hampshire Asylum for the Insane, in the official year 1878-79, there were twenty-seven recoveries; but Dr. Bancroft so arranges them, in tabular form, that we learn that only eleven of them were recoveries from a first attack. Sixteen of the persons had *previously* been reported recovered,—two of them once each, eight of them twice each, one of them four times, one of them eight times, one of them nine times, and one of them thirty-five times. After this last reported recovery, the total of the reported recoveries of these *sixteen* persons is *ninety-two*.

This is a remarkable proportion of recoveries subsequent to the first, and, undoubtedly, larger than that of most of the hospitals. The New Hampshire Asylum is among the *old* institutions, and these secondary recover-

ies increase in number with the advancing age of the hospital. But, in the face of such facts as these explanations reveal, those superintendents who do not thus explain the recoveries reported by them, need not be surprised if it should come to be believed that they are quite willing that the deception of the public mind should be continued.

In the Second Study, surprise was expressed that some method of giving the reader of their reports a correct understanding of their reported recoveries in this respect had not been adopted at the British asylums. Among the reports received from them in the course of the last year, there are two in which something of the kind has been introduced.

At the Prestwich Asylum, in 1878, there were 214 recoveries. The superintendent, Dr. H. Rooke Ley, writes, in relation to them, that "one hundred and seventy-five had never before been treated in this asylum, and had therefore recovered from a first attack; of twenty-five, this was the second admission; of eight, the third admission; of two, the fourth admission; of two, the fifth admission; of one, the sixth admission; and of one, the seventh admission. The recorded condition, when discharged, of the thirty-nine who had previously been under treatment in this asylum, was, recovered in thirty-three instances, and improved in six instances,—consequently, ninety-two recoveries have been contributed to the statistics of this asylum by these former residents."

This, so far as I am informed, is the first exposition of the kind in England.

W. H. Garner, Esq., Medical Superintendent of the

Clonmel District Asylum, Ireland, in his report for 1878, says, "The discharges amounted to thirty-one of both sexes, being an average (percentage?) of over thirty-five on admissions. Of these latter, however, I am bound to say, seventeen were relapsed cases; so that, as has been well pointed out by Dr. Pliny Earle of the State Lunatic Asylum at Northampton, U.S.A., the percentage of recoveries on admissions must be taken *cum grano salis*."

Of the thirty-one patients discharged, twenty-eight were reported recovered, and three improved. Please observe the noteworthy fact, that, while twenty-eight were *discharged* recovered, seventeen were *received* who had *previously been discharged recovered*. The excess of recoveries *sent out* into the world, over the recoveries which the world had *sent back*, was *only nine*.

We will now enter upon an exposition to which the careful attention of all persons interested in the subject is especially invited. How dry soever may be its aspect, let them give it a thoughtful reading, and it will not be surprising if they discover that they have been amply repaid.

IT IS THE END THAT CROWNS THE WORK.—In a recently published pamphlet entitled "Recoveries from Mental Disease," which will receive more prolonged attention farther on, the author, Dr. Isaac Ray, writes as follows:

"While it appears that once almost every patient recently attacked recovered, our statistics show that now, taking our hospitals together, hardly half of them have been so fortunate."

The object of this section is to recall to notice a few

of those recoveries of the insane which took place not less than thirty-five years ago, at a time included in that period to which Dr. Ray alludes as one that was so exceedingly favorable to restoration from mental disorders. We may thus, perhaps, be enabled to ascertain the true character of those recoveries.

In an examination, a few months ago, of a reprint, in 1863, of the previously published reports of the Illinois Hospital for the Insane, I met a table copied from the report of the Worcester Lunatic Hospital for 1843, and republished in connection with a memorial by Miss Dix, for the purpose of showing the remarkable advantage, pecuniarily, of the treatment of insanity in its early stages. It presents two columns, or series of cases, twenty-five in each. Those in the first column were chronic and incurable; those in the second were recent, and had been discharged—all of them “recovered”—from the said hospital, in the course of the official year covered by the report.

The official year at that time ended with the 30th of November, and not, as now, with the 30th of September.

While studying the table, it occurred to me that it would be interesting to know the history, subsequent to their discharge, of the twenty-five persons who recovered after so short a period of treatment, and at so trifling an expense. Such was the inception of this chapter, and this the cause for the selection of the table of 1843, in preference to either of its predecessors. The first table of the kind was published, if I mistake not, in the Worcester report for 1837–38. The practice was continued for a series of years, and was adopted at various other institutions of the kind. Indeed, the

report for 1843, which contains the table, gives the results of similar tables at the State hospitals of Maine, Ohio, and Virginia. The table is here introduced, in order that the reader may obtain a clear understanding of the subject.

TABLE SHOWING THE COMPARATIVE EXPENSE OF SUPPORTING OLD AND RECENT CASES OF INSANITY.

From which we learn the Economy of placing Patients in Institutions in the early periods of Disease.

No. of the Old Cases.	Present Age.	Time Insane.	Total Expense at \$100 a year before entering the Hospital, and \$132 a year since; last year, \$120.	No. of the Recent Cases discharged.	Present Age.	Time Insane.	Cost of Support at \$2.30 per week.
2	69	28 yrs.	\$3,212.00	1622	30	7 wks.	\$16.10
7	48	17 "	2,004.00	1624	34	20 "	46.00
8	60	21 "	2,504.00	1625	51	32 "	73.60
12	47	25 "	2,894.00	1635	23	28 "	64.40
18	71	34 "	3,794.00	1642	42	40 "	92.00
19	59	18 "	2,204.00	1643	55	14 "	32.20
21	39	16 "	1,993.00	1645	63	36 "	82.80
27	47	16 "	1,994.00	1649	22	40 "	92.00
44	56	26 "	2,982.00	1650	36	28 "	64.40
45	60	25 "	2,835.00	1658	36	14 "	32.20
102	53	25 "	2,833.00	1660	21	16 "	36.80
133	44	13 "	1,431.00	1661	19	27 "	62.10
176	55	20 "	2,486.00	1672	40	11 "	25.70
209	39	16 "	1,964.00	1676	23	23 "	52.90
223	50	20 "	2,364.00	1688	23	11 "	25.70
260	47	16 "	2,112.00	1690	23	27 "	62.10
278	49	10 "	1,424.00	1691	37	20 "	46.00
319	53	10 "	1,247.00	1699	30	28 "	64.40
347	58	14 "	1,644.00	1705	24	17 "	39.10
367	40	12 "	1,444.00	1706	55	10 "	23.00
400	43	14 "	1,644.00	1709	17	10 "	23.00
425	48	13 "	2,112.00	1715	19	40 "	92.00
431	36	13 "	1,412.00	1716	35	48 "	110.40
435	55	15 "	1,712.00	1728	52	55 "	126.50
488	37	17 "	1,912.00	1737	30	33 "	75.90
		454 yrs.	\$54,157.00			635 wks.	\$1461.30

Average expense of old cases..... \$2,166.20
 Whole expense of 25 old cases..... 54,157.00
 Average expense of recent cases 58.45
 Whole expense of 25 recent cases till recovered..... 1,461.30

“The results of this table are so striking, and show so conclusively the importance of early admission to the insane hospitals, that many other institutions have instituted the same inquiry with similar results.” (See Report of the Worcester Lunatic Hospital for 1843.)

The report contains no *assertion* that the twenty-five recent cases were *permanently* cured; neither does it allude to the probability, or the possibility, that any one of the persons might again become insane: hence the almost inevitable impression left upon the mind of the general reader by a perusal of the table would be that the twenty-five persons whose insanity was recent had never before been insane; and that now, on the first attack of that disease, they were returned to their homes and to society fully and permanently restored to mental soundness. Indeed, the whole illustrative force of the table depends upon the assumption that they were permanently cured. Furthermore, coupled with this impression would be the inference that, if the twenty-five persons whose disease was chronic had been taken to a hospital in the early stages of their mental unsoundness, they, too, would have been cured,—an inference the truth of which is wholly improbable. Then follows the practical deduction: If you send your insane friend early to the hospital, his cure will cost but \$58.45; if you neglect such early action, his support, while insane, will cost at least \$2166.20. This deduction was, apparently, the whole ostensible object of the table.

Taking, then, these twenty-five persons, so happily, so quickly, and so cheaply withal, redeemed, by restoration, from one of the greatest ills that flesh is heir to, let us, while learning something of their antecedent his-

tory, go forth with them from the hospital, and, so far as is practicable, follow them to the present time, if they still are living, or through their subsequent life, if that life be ended.

THE TWENTY-FIVE RECENT CASES RECOVERED.—No. 1622.—This was a man, and this was his *second* attack of insanity, but his first admission to the hospital. He was discharged *recovered*, as in the table, May 1, 1843. Within about three weeks after the table was made,* and on the 20th of December, 1843, he was again committed to the hospital. He remained a little more than three months, and was again discharged *recovered* March 25, 1844.

He afterwards married, and it is believed that he has never been insane since he left the hospital. He was well, and living with his family, one year ago, as he probably is now. This information comes from one of his friends who visited him in 1878.

No. 1624.—A woman. This was her *second* attack of insanity, the first one having occurred two years before her admission to the hospital. The case is recorded as periodical and suicidal. She was discharged *recovered*, as in the table, June 21, 1843. An informant writes me, September, 1879,—“She is living, and is apparently in good health. I was not able to find out whether she ever became insane again or not.”

* It is assumed that the table was made on the 1st of December, because the official year ended with the 30th of November. It could not have been made before the 28th of November, because two of the patients represented in it were discharged on that day. Eight of the others were discharged in the course of that month.

No. 1625.—A man. This was his *second* admission into the hospital. He was admitted the first time in July, 1840. He remained less than two months, and was discharged *recovered* September 17, 1840. He was discharged *recovered* the second time, as in the table, September 25, 1843. He was admitted the third time January 8, 1851, and nearly eight months afterwards, on the 29th of August, 1851, discharged *recovered* for the third time.

His father and a son were insane. On his third admission, his case is recorded as "periodical, once in about four or five years." Hence it appears that there must have been one attack between the last two admissions to the hospital.

Since the foregoing was written, I have learned that he had another attack in 1859, which lasted nearly a year. He was not taken to a hospital, but was cared for at home. After recovery he remained well until 1872, when he died of cholera morbus.

His wife, and the son above mentioned, were patients at the Worcester Hospital, and the former died there.

No. 1635.—A man. Insanity is hereditary in his family. He was discharged *recovered*, as in the table, October 11, 1843. He still lives and is in business. One of his relatives states (1879) that he "has not been insane since he left the Worcester Hospital;" and that he "is somewhat eccentric, but in no wise insane."

No. 1642.—A man. The case is recorded as hereditary and suicidal. Discharged *recovered*, as in the table, June 21, 1843. He was admitted again November 19, 1844, and discharged *recovered*, the second

time, February 18, 1845. He was admitted the third time July 14, 1856, and died within less than thirty-six hours afterwards.

On his last admission, it is recorded that a sister and a brother were insane, and that his son "hung himself one year ago."

No. 1643.—A woman. Her father was insane, and she had had *two* previous attacks of insanity, "some twenty years ago, in two successive springs." After a residence of a little more than three months in the hospital, she was discharged *recovered*, as in the table, July 1, 1843.

Her subsequent history is related to me, in dialogue form, by a correspondent who received it in conversation with one of the nearest relatives of the woman, and a member of her family.

Question. "Was she cured at the hospital?"

Answer. "Oh, no. She was just the same as she had previously been; very despondent most of the time; and she was constantly watched,—not that we feared her doing harm to others, but that she might harm herself."

Question. "There was no change, after her going to the hospital, in her condition from what it had been previously?"

Answer. "Oh, no. She continued the same until her death, in 1854."

Question. "What was the cause of her death?"

Answer. "She was run over by the cars. Most people thought it might have been by accident, but we could not tell."

No. 1645.—A woman. This was her *third* admission to the hospital, and she was admitted four times afterwards. Her record is as follows:

First admission, August 2, 1838; discharged *recovered* January 10, 1839.

Second admission, April 26, 1840; discharged *recovered* November 6, 1840.

Third admission, April 29, 1843; discharged *recovered*, as in the table, November 1, 1843.

Fourth admission, May 31, 1845; discharged *recovered* June 23, 1846.

Fifth admission, January 25, 1849; discharged *recovered* May 8, 1851.

Sixth admission, November 6, 1855; discharged *recovered* May 13, 1856.

Seventh admission, January 12, 1857; died at the hospital, of "old age," April 22, 1857.

It is recorded, on her second admission, that her insanity was hereditary and periodical; and, on her fifth admission, that two of her brothers and one sister were insane.

No. 1649.—A man. Admitted May 10, 1843; discharged *recovered*, as in the table, November 17, 1843. An informant writes that he is now living and well; and that he "has shown no signs of his previous trouble for *a number of years*." As it is nearly thirty-six years since he left the hospital, this language would seem to imply that he *has* shown signs of the disorder since the time of discharge.

No. 1650.—A woman. Admitted May 11, 1843; discharged *recovered*, as in the table, September 12, 1843. She is still living, and "has never shown any symptoms of insanity since she left the hospital."

No. 1658.—A woman whose mother was insane. She was admitted May 22, 1843, and discharged *re-*

covered, as in the table, July 27, 1843. In about two weeks after the table was made, and on the 13th of December, 1843, she was again committed to the hospital. She was discharged *recovered*, the second time, March 15, 1844.

Since she left the hospital she has had two attacks of insanity, one of them following childbirth; but they were not severe nor of long duration, and she was not taken to a hospital. She is now living and well, the mother of twelve children, ten of whom are living.

No. 1660.—A woman,* whose mother and a sister were insane. This was her second term of treatment in the hospital. Her first admission was on the 14th of February, 1840. She remained until May 26, 1840, and was then discharged *recovered*.

Her second admission—the one in the table—was on the 23d of May, 1843. She was discharged *recovered*, as in the table, August 23, 1843.

After an absence of very nearly three years, she was admitted the third time, August 11, 1846. Within less than six weeks, and on the 17th of September, 1846, she was discharged *recovered* for the third time.

She died at home, in 1849, "aged about twenty-eight years."

No. 1661.—A young woman, whose insanity is recorded as hereditary. She was admitted May 24, 1843, and discharged *recovered*, as in the table, November 7, 1843. She was admitted again May 10,

* Information received since the original publication of this study has enabled me to make the history of this case more accurate than it was at that time.

1847, and discharged *recovered*, the second time, September 30, 1847. Admitted the third time, December 3, 1849, and discharged *recovered*, the third time, March 20, 1850.

I am informed that she "again became insane, and went to the hospital in New Hampshire;" this was on the 14th of December, 1853. She was removed to the McLean Asylum, September 6, 1854, "where she remained, insane, until her death, July 5, 1867. Age, forty-four years."

No. 1672.—A man. His disease is recorded as periodical in the table on page 24 of the Worcester report for 1843. He was admitted June 10, 1843, and discharged *recovered*, as in the table, August 18, 1843. He is now (1879) in the almshouse of a town, an officer of which writes to me as follows: "He never was cured. He is a foolish, harmless fellow. He was taken from the hospital (in 1843) to our almshouse, where he now is, in fair health, able to do very little light work; simple and harmless when pleased, but ugly when crossed very much."

No. 1676.—A woman. This was her *third* attack of insanity, and her *second* admission to the hospital. Her first admission was on the 24th of May, 1842. She was discharged *recovered* July 4, 1842. The second admission, as in the table, was on the 13th of June, 1843. She was discharged *recovered* November 16, 1843. I am informed that she "remained well, after her return from the hospital, as long as she lived, which was not many years. I think she died about 1850."

No. 1688.—A young woman. This was her *fourth* admission to the hospital. Her first admission was on

August 20, 1836. She was discharged *recovered* October 28, 1836. Her second admission was on January 19, 1839; discharged *recovered* July 4, 1839. Third admission, August 7, 1840; discharged *recovered* November 25, 1840. At this admission her case was recorded as periodical. Her fourth admission was on June 30, 1843. She was discharged, as in the table, *recovered*, for the fourth time, September 11, 1843. On the last admission it is stated that she was twenty-two years of age; consequently she could have been but fifteen at the time of her first admission. After her fourth recovery and departure from the hospital, I am informed that "she married, went West, lived with her husband some years, and was in an insane asylum out there."

Having returned to Massachusetts, she was admitted into the Taunton Lunatic Hospital, March 18, 1864, and discharged therefrom, *recovered*, November 30, 1864. She was committed to the Worcester Hospital for the fifth time, August 5, 1865, and nearly two years afterwards, on the 28th of June, 1867, was discharged *not improved*. She was taken directly to the almshouse of the town which supports her, and there she still remains. "She works in the family, and is quiet," writes my informant; "but at times is wild."

No. 1690.—A young woman. Admitted July 5, 1843, and discharged *recovered*, as in the table, October 21, 1843. About five years afterwards, in 1848, she died of consumption, not having been insane after she left the hospital.

No. 1691.—A woman. Admitted July 8, 1843, and discharged *recovered*, as in the table, October 16, 1843. She died on the second anniversary of her discharge,

October 16, 1845. I am not informed whether her insanity reappeared. Probably it did not.

No. 1699.—A man. Admitted July 20, 1843, and discharged *recovered*, as in the table, November 15, 1843. Of his subsequent condition, one of his nearest relatives writes (1879) as follows: "He has never been what we call insane since he came home; but he has had spells of nervous excitement, when he would not sleep well, and then he would be full of his talk, and very nervous, for from four to six weeks. He is never violent, but easily excited if he is opposed. His nervous spells are generally once a year, not always, and then in cold weather. We feel anxious about him, fearing he may be insane."

No. 1705.—A woman. Admitted July 25, 1843, and discharged *recovered*, as in the table, November 27, 1843. She was admitted the second time July 5, 1848, and discharged *recovered* December 5, 1848. Admitted the third time December 27, 1851, and discharged *recovered*, for the third time, July 16, 1852. On the 19th of July, 1856, she was admitted into the Taunton Lunatic Hospital, where she died of consumption on the 17th of October of the same year.

No. 1706.—A woman. This was her *second* attack of insanity, the first having occurred in 1823. She was admitted July 26, 1843, and discharged *recovered*, as in the table, September 26, 1843. She remained sane during the rest of her life, and died February 8, 1869, aged eighty years.

No. 1709.—A young man. Admitted August 7, 1843. The record on admission states that "he has had previous attacks," and that "he has a brother

insane now;" and in the table on page 25 of the Worcester report for 1843, his case is called periodical. He was discharged *recovered*, as in the table, September 26, 1843. Ten days afterwards, on the 6th of October, 1843, he was admitted the second time. This must have been several weeks before the table was finished, because the official year did not end until November 30, and no less than thirteen of the other patients referred to in the table were discharged *after* the 6th of October.

He was discharged the second time *improved*, January 11, 1844. The records of this admission state that he "received an injury on the head many years since, from which he never entirely recovered." Although discharged the last time only "improved," he afterwards became so well that he married. He subsequently left New England, and died somewhere in the Middle or the Southern States. It is not known that he ever had another attack of insanity after he left the hospital; but a person who knew him well from early life, while he remained in New England, says that "he was always a weak-minded man."

No. 1715.—A young woman. This was her *second* admission into the hospital *in 1843*, and she was admitted three times afterwards; and, on this admission, the case is called periodical in the table on page 25 of the report for 1843. Her record is as follows; First admission, April 8, 1843; discharged *improved* June 12, 1843. Second admission, August 16, 1843; discharged *recovered* November 28, 1843. Third admission, February 18, 1846; discharged *recovered* June 30, 1846. Fourth admission, November 13, 1846; discharged *re-*

covered June 15, 1847. Fifth admission, October 19, 1847; discharged *recovered* July 12, 1852.

Her last term of residence in the hospital, as will be perceived, was more than four years and eight months. The record of her second admission says that she "has had fits," and that her "mind (is) not sound at any time." On the third admission it is recorded that the case is periodical, and that "for three weeks past (she) has had frequent convulsive fits daily."

This case is as interesting as it is remarkable. Notwithstanding the foregoing history, she has since married, and borne two children, and is now living and well.

No. 1716.—A woman. The earliest information we have of her is, that on April 30, 1830, at the age of twenty-one years, she was admitted into the McLean Asylum. She was discharged therefrom, July 31, 1830, *much improved*. She was admitted at the Worcester Hospital, as in the table, August 18, 1843. The records state that this was her *fourth* attack of insanity, and that each attack followed childbirth. She was discharged *recovered* November 28, 1843.

On the 30th of April, 1849, she was admitted at the Butler Hospital, Providence, Rhode Island, where she remained seventeen months. She was removed thence, by her husband, October 8, 1850; and four days afterwards, on the 12th of October, 1850, she was admitted the second time at the Worcester Hospital. The records of this admission contain the following statements: "Insane for twenty years; was here seven years ago; now has not worked for more than three years." She *died* at the Worcester Hospital, of consumption, March 6, 1851.

No. 1728.—A woman. Admitted September 7, 1843. The records state that she had had "occasional symptoms of derangement for ten years," and that the disease was hereditary. She was discharged *recovered*, as in the table, November 23, 1843. She was not admitted again; but I have learned through her relatives that no permanent benefit was derived from her treatment in the hospital. Says my informant, "She had been at home from the asylum but very few days before she was as bad as before going," and "her mental condition remained the same throughout life." She died of consumption November 5, 1854.

No. 1737.—A woman. Admitted September 23, 1843. Her disease is recorded as hereditary, and she had a brother in the Worcester Hospital. She was discharged, as in the table, *recovered* November 22, 1843.

She is still living. My informant writes of her as follows: "She was and is a Second-Advent woman. She believes that there is no salvation except through her creed, and in so far is a monomaniac in religion; but is right in all other respects, and is in excellent health, as she has been always since her discharge from the hospital in 1843."

And so we come to the end of the table, and—to an end of its argument. Time and history sometimes deal rudely with the most sanguine hopes and the most beautiful devices of men. The really surprising results of this investigation are suggestive of extended comment, but they must be dismissed by a brief reference to one or two points.

1. Of all the hitherto-published representations of the curability of insanity, the most unfavorable is that of

the late Dr. Thurnam, whose general formula is given in Study First, page 60.

Let us compare the results in these twenty-five persons, recovered at the Worcester Hospital, with that formula. According to the latter part of the formula, of the twenty-five persons,—

(a) *Ten* should never have a second attack ;

(b) *Fifteen* should have a second attack and perhaps more ; and

(c) Of these *fifteen*, *ten* should die insane.

But we find that, in fact, admitting that the twenty-five *reported* recoveries *were* recoveries, then, under the most favorable construction, there were of the twenty-five—

(a) Only *seven* who did not have a second attack ;

(b) *Eighteen* had more than one attack ;

(c) As so many are still living, it is impossible to say what will be the final result in regard to the number dying insane. But already *five* have died insane at the hospitals, and *two* have died insane at home, making a total of *seven*. Two others are at almshouses, both having for a long period been incurably insane (they will undoubtedly die so), and one has died at home, who “was never well [sane] but a few months at a time.”

It is no exaggeration of the unpleasant aspect of these results, to say that they are no more favorable than Dr. Thurnam’s formula represents. They are, indeed, less favorable, but their near approximation to that formula is somewhat remarkable.

2. Can our statisticians, philanthropists, and statesmen longer be surprised that the hospitals do not put a stop to the increase of insanity ?

DR. RAY'S ESSAY.—The "Recoveries from Mental Disease," from which I have already quoted, was suggested by what has been written upon the same subject in the last two annual reports of the Northampton Lunatic Hospital (Studies Second and Third), and in a pamphlet entitled "The Curability of Insanity" (Study First), which was read before the New England Psychological Society, in December, 1876.

In regard to the essay as a whole, it is submitted that its statement and general representation of my argument are very inaccurate. At the opening of *his* argument, Dr. Ray says, "He (Dr. Earle) finds, as a general fact, that thirty or forty years ago, the proportion of recoveries, or cures as they are sometimes called, was much larger than it has been of late years. . . . This remarkable difference Dr. Earle attributes to two sources of error committed by those who reported the large proportion of recoveries. He then proceeds to state that these two sources of error are, in general terms, first, the temperament of the person reporting the recoveries; and, secondly, the duplicate, and sometimes multiply, recoveries of the same person, whereby the recoveries of *case* are made to appear much larger than recoveries of *persons*."

Now, so far from assuming the decreased number of recoveries as my premises or proposition, it was one of the *objects* of the paper *to prove that there has been such a decrease*. The attempt to prove it is not made until near the close of my essay; and the fact of that decrease is made the seventh and last deduction from the whole discussion. Furthermore, strange as it may seem, neither of the "two sources of error" is anywhere alleged to be the cause of that reduction.

After having considered the two sources of error, and arrived at the conclusion that they do not satisfactorily account for the reduction in the number of cures, Dr. Ray says, "As, then, neither the temperament of the physician, nor the repeated counting of periodical cases, accounts for the larger proportion of recoveries in the earlier times, we must look for the explanation in another direction, and we shall find it in various agencies that have come into operation in later times." He goes on to explain, as if it were a discovery of his own, that these agencies are, in short, first, the admission to the hospitals of a larger proportion of incurables; and, secondly, the increased incurability of the disease.

As before mentioned, my aim was to demonstrate that such a reduction or diminution has taken place, and *not* to show the causes of it. And yet those causes are briefly alluded to, on page 48 of "The Curability of Insanity," as follows: "If the causes of the general reduction of the proportion of recoveries, as stated under the seventh head, be sought, some of them will be found in, or inferred from, preceding portions of this discussion.

"Among others are, first, the probable fact that, as institutions have multiplied, *the proportion of chronic and incurable cases taken to them has increased*; and, secondly, the not improbable fact that *insanity, as a whole, is really becoming more and more an incurable disease*. If it be true, as asserted by that accomplished scholar and profound thinker, Baron von Feuchtersleben,—and doubtless no one will deny its truth,—that in the progress of the last few centuries, as civilization has advanced, and the habits of the race have been con-

sequently modified, disease has left its stronghold in the blood and the muscular tissues, and at length seated itself in the nervous system, it follows, perhaps, as a necessary consequence, that by a continuation of the cause of this change, the diseases of the brain and nerves *must* become more and more permanent.”* And in Study Second, written in 1877, I say, “As hospital accommodations have increased, *more and more of the large class of the chronic insane, who formerly remained among the people, are thus removed from their homes*”† to the hospitals; and I then proceed to quote from six authorities, showing that the same state of things is found in Great Britain.

Thus, when Dr. Ray becomes dissatisfied with the two agencies erroneously assumed by him to be those to which I attributed the reduction of recoveries, and looks “for the explanation in another direction,” he is not obliged to look beyond the writings which he is criticising; and four or five pages, near the close of his paper, are essentially only a mere elaboration of the ideas contained in the paragraphs just quoted from those writings.

Not only have I not alleged the “two sources of error” as causes of the reduction of recoveries, but I never, even in thought, assumed or believed them to be, to any considerable extent. The reporting of multiple recoveries certainly cannot be, because more have been reported of late years than thirty or forty years ago. The older the hospital, the larger the proportion of such recoveries. In regard to the other “source of error,”

* See pages 57, 58, *ante*.

† Page 70, *ante*.

—the diversity of temperament of the different reporters,—it may and it may not have tended to reduce the number as a whole, although there are instances in which it has appeared to reduce them, which are more striking than any in which they appear to have been increased by it. The only *stated* object of the essay on “The Curability of Insanity” (Study First) is, to ascertain whether the popular belief in the great curability of that disorder is justified by facts. The general scope of that essay is asserted to be “a *review* of the subject of the curability of insanity.”* This made the field of discussion so broad that the influence of temperament was legitimately mentioned, rather as a curious phenomenon, and hence a matter of general interest, than as one of the agents the influence of which has reduced the number of recoveries. And it is introduced, not as necessarily either a diminisher or an enlarger of recoveries, but as an “influence which *has an important effect* upon the proportionate reported restoration.”† In one instance that effect may be to reduce, in another to increase. And I perceive no reason why its effect was any greater, either way, thirty or forty years ago, than it is now, other than its stimulation, at the former period, by the more active zeal and rivalry among the superintendents of the hospitals. So far it undoubtedly *did* exert an effect of increase, at that time; and, as the stimulation has subsided by the less active rivalry, the effect is now towards a reduction.

The remarkable instance‡ adduced in my pamphlet, in which one superintendent, at Worcester, reported, in

* *Ante*, page 8. † *Ante*, page 14. ‡ *Ante*, pages 16, 17.

a period of three years, ninety-five per cent. more recoveries than were reported by his successor in a period of the same duration; and another instance, mentioned in Study Third,* in which one superintendent of the McLean Asylum, during a period of seven years, reported one hundred and twenty-one per cent. more recoveries than did his successor in a similar period,—both occurred within the last fifteen years.

Even Dr. Ray, himself, not only acknowledges, in no less than three different places in his essay, that this difference of temperament *has* affected the statistics of recoveries, but he enters into a somewhat extended argument to *prove* that it has, and that, in the nature of the human constitution, it cannot be otherwise. Nevertheless, he does “question whether it has had all the influence attributed to it” by me, inasmuch as I “think it has sometimes led to a difference in the number of recoveries as reported, amounting to twenty-five per cent.” Here, again, Dr. Ray does not quite accurately represent the author whom he criticises. I did not write “has sometimes led;” but I did express my long-existing belief that “the number of cases reported as recovered *might differ* at least twenty-five per cent., according to the man who *might* act as judge of their mental condition.”† But that is unimportant; the error of representation may be regarded as trivial. I still retain the belief; and for the benefit of persons who would prefer the concrete to the abstract, I will relate an anecdote. Within the last three months, in conversation with the superintendent of a large American

* *Ante*, pages 89, 90.

† *Ante*, page 16.

hospital,—a physician who has enjoyed the acquaintance of both of the ex-superintendents about to be mentioned,—I said, “I believe that if, when Dr. Ray and the late Dr. Rockwell were in active service, it could have been possible for both of them, each in his respective institution, to treat the same patients, and to discharge them in the same condition, we should have had, for every seventy-five recoveries reported by Dr. Ray, no less than one hundred reported by Dr. Rockwell.” Here is a difference, not alone of twenty-five, but of thirty-three and one-third per cent.; and yet the superintendent to whom I spoke immediately over-endorsed the opinion with the remark, “I think there would be *more* difference than that.” Hence as, in the days of Molière, there were fagots and *fagots*; so, now, there are opinions and *opinions*.

The general misconception and misinterpretation of the writings under his review has necessarily vitiated many of the minor parts of Dr. Ray’s argument; and more than once in these he places me in an entirely false position. Thus, for example, he alludes to my use of the statistics of the Friends’ Asylum at Frankford, and represents me as employing them for the purpose of accounting for the *diminution of the number of recoveries* in the course of the last thirty or forty years. I used them for no such thing. I used them for the purpose, primarily, of showing that, at any and at all times, in consequence of repeated admissions of the same person, the percentage of *cases* that recover is generally larger than that of *persons* that recover; and, secondarily, by such showing, to illustrate the method by which the people at large have received the im-

pression that insanity is a far more curable disease than it really is.

My argument, when using the Frankford statistics, was intended to be, briefly, as follows: The people have been taught to believe that from 75 to 90 per cent. of insane persons can be cured. The Frankford statistics, the best we have, show but 65.69 per cent. of recoveries. These recoveries are of *cases*, not of *persons*. Rejecting the readmissions, we find that the recoveries of *persons* were but 58.35 per cent. But these were not *permanent* recoveries. So many of the recovered persons were readmitted that the real proportion of persons who recovered *permanently* was only 48.39 per cent. Hence, instead of having 90, or 80, or even 75 *insane persons permanently cured*, in each hundred of the acutely insane, these statistics show that, at Frankford, only 48 (48.39) were so cured. Some persons will probably think that to be a pretty important difference.

It would seem that Dr. Ray wrote his essay, not with my writings before him, but rather with a very imperfect and confused memory of their contents, as derived from a hasty perusal of them at some period comparatively remote. He makes a perfect muddle of my argument; and throughout his essay, he is almost constantly firing at a target of his own, all the time laboring under the delusion, and all the time leading his readers to believe, that he is firing at mine.

It would occupy too much time and space to follow the doctor through the other similar mistakes and perversions in his essay. There are, however, some other things that may be noticed. In allusion to the recov-

eries at Frankford, he says, "We doubt if in any other hospital the discharges have been at the rate of one patient recovered fifteen times; another, thirteen; a third, nine; a fourth, eight; and a fifth, seven." "Nothing easier," writes Dr. Hack Tuke, "than to make sweeping statements without proof." It is no less easy to make a statement that rests upon a doubt. The doctor was evidently in a doubting mood when his paper was written. Permit me to dispel the doubt in, at least, this one instance.

The total of recoveries of the five persons at Frankford is *fifty-two*.

At the Hartford Retreat, five persons have been reported recovered as follows: one, fourteen times; another, thirteen; a third, nine; a fourth, nine; and a fifth, nine. Total recoveries of the five persons, *fifty-four*.

At the Bloomingdale Asylum, as long ago as the year 1845, five *men* had been reported as recovered,—one of them, seventeen times; another, thirteen; a third, twelve; a fourth, eleven; and a fifth, ten. Total recoveries of the five, *sixty-three*.

At the same institution, at the same time, five *women* had been reported recovered,—one, twenty times;* another, nineteen; a third, seven; a fourth, seven; and a fifth, six. Total recoveries of the five, *fifty-nine*.

Taking the highest five of both of these sex-groups of Bloomingdale patients, one of them recovered twenty times; another, nineteen; the third, seventeen; the

* This woman afterwards increased her recoveries to forty six, or only six less than the total of the five persons at Frankford.

fourth, thirteen; and the fifth, twelve. Total recoveries of the five, *eighty-one*.

At the Worcester Hospital, five *men* have been discharged recovered,—one of them, fourteen times; another, fourteen; the third, twelve; the fourth, nine; and the fifth, nine. Total recoveries of the five, *fifty-eight*.

At the same institution, five *women* have been discharged recovered,—one of them, twenty-two times; another, sixteen; the third, fifteen; the fourth, fourteen; and the fifth, eleven. Total recoveries of the five, *seventy-eight*.

Uniting these two sex-groups of Worcester patients, and taking the highest five of them, one recovered twenty-two times; another, sixteen; the third, fifteen; the fourth, fourteen; and the fifth, fourteen. Total recoveries of the five, *eighty-one*.

At the New Hampshire Asylum at Concord, even among the twenty-seven patients discharged recovered in the official year 1878-79, there were five, the number of whose recoveries had been,—one of them, thirty-six times; another, ten; the third, nine; the fourth, five; and the fifth, three. Total recoveries of the five, *sixty-three*. The number of recoveries of these five persons is larger, by eleven, than that of the five at Frankford; but of all the patients ever treated at Concord, the highest five were as follows: one recovered thirty-seven times; another, sixteen; the third, eleven; the fourth, ten; and the fifth, ten. Total recoveries of the five, *eighty-four*.

In every one of the instances here adduced, the "rate" of recoveries is higher than that of the Frank-

ford patients; and in that of either the Bloomingdale Asylum or of the Worcester Hospital, it is fifty-five per cent. higher; while in that of the Concord Asylum, it is sixty-one per cent. higher.

Should any vestige of doubt still remain, perhaps it may be obliterated by the fact that, at the Concord Asylum, *ten* persons have recovered a total of one hundred and twenty times, or an average of precisely twelve recoveries to each. This rate, however, is not quite so high as that of the above-mentioned ten patients (five men and five women) at Bloomingdale, or as of the ten at Worcester. At the former the ten patients recovered one hundred and twenty-two times, and at the latter one hundred and thirty-six times,—*an average of over thirteen recoveries to each person.*

Again, Dr. Ray writes as follows: "Dr. Bell had good reason for saying, in his report of the McLean Asylum for 1840, 'that the records of this asylum justify the declaration that *all cases certainly recent*,—that is, whose origin does not, either directly or obscurely, run back more than a year,—recover under a fair trial.'"

It may be assumed that Dr. Bell had equally good reason for saying, as he did say, in 1857, applying his opinion of the general curability or incurability of insanity to the case of an individual,—“I have come to the conclusion, that when a man once becomes insane, he is about used up for this world.” In 1840, when he wrote the extract quoted by Dr. Ray, he had been but four years in the specialty, and his experience was comparatively small. Seventeen years afterwards, when the latter expression of his opinion was given, that experi-

ence was greatly enlarged, and it is not unlikely that he had had the opportunity to learn, in the later history of the patients who recovered in the earlier years of his residence at the McLean Asylum, the frequency, and often the permanency, of subsequent attacks, such as the reader may have learned in the foregoing history of the twenty-five patients discharged recovered from the Worcester Hospital in 1843. Though decided in his opinions, Dr. Bell's mind was open to conviction; and when those opinions were altered, he had the independence, the manliness, to acknowledge it.

In regard to repeated recoveries of the same person, Dr. Ray remarks, "The doctor (Earle) himself leaves it in doubt whether he would require us to report no case as recovered which has been so reported on any previous occasion. He certainly prescribes no rule to be observed." Dr. Ray must have either overlooked or forgotten the paragraph of Study Third, from which the subjoined extract is taken :

"Nowhere in my essay is it asserted that the calculation of recoveries should *not* be made upon *cases*. I have always pursued that method, and I do not perceive in what way it can be avoided. All that I have insisted on is, that the reports of recoveries shall be accompanied by *an explanation*, by which the reader can learn whether those recoveries are from the first attack, or from attacks varying from the second to the thirtieth, the fortieth, or the fiftieth; whether, if you report ten recoveries, it is to be understood that ten different persons have really recovered, or merely that one person has recovered from ten successive attacks. The inability to convey this information is the grand fault in the gen-

eral method of reporting, and by this fault public opinion has been grossly misled.”*

“Many of the instances of repeated recoveries mentioned by Dr. Earle,” remarks Dr. Ray, “were periodical in their character. . . . These, certainly, were not recoveries, in any true sense of the term.” But, in most instances,—in every instance but one, I believe,—they were *reported* as recoveries, and hence one cause of the prevailing misapprehension in the public mind in regard to the curability of insanity. The exceptional instance is that of the cases at the Pennsylvania Hospital, in which I inferred that a patient had recovered thirty-two times, from the fact that he *is reported* to have had *thirty-three attacks*. But, in allusion to those cases, Dr. Ray says, “We learn from Dr. Kirkbride that no periodical case was ever discharged (at the Pennsylvania Hospital) as recovered.” Referring to page 37 of Dr. Kirkbride’s report for 1878, I find a table “showing the number of the attacks in 7867 cases,” with the following explanation: “This table shows, that of the entire number admitted, 5695 were suffering from their first attack of insanity, 1259 from a second attack, 421 from a third, and so on, till thirteen were laboring under a ninth attack when received into the institution. *All these were distinct attacks of insanity*, and, after the first, had been developed subsequently to recoveries from a previous attack or attacks of the disease.”

According to this explanation, a part of the cases which, in the First Study, are taken from the report for 1875 of the Pennsylvania Hospital, *were*, as I in-

* *Ante*, pages 97, 98.

ferred them to be, cases that had recovered from each previous attack. In the 94 persons admitted on the fifth attack, and the 172 persons on the fourth attack, the disease was *not* periodical, but every patient had recovered from each of his previous attacks. The 172 persons admitted on the fourth attack had, consequently, previously recovered a total of 516 times, making the number of previous *recoveries* 344 greater than the number of *persons*. That will do very well, without any of the periodical cases. It is sufficient to illustrate my point, that the reported *recoveries* largely exceed the number of *persons* that recover. Or if it be not sufficient, it may now be supplemented by the thirteen persons mentioned by Dr. Kirkbride in the above explanation, as "laboring under a ninth attack when received into the institution." These thirteen persons had already recovered eight times each,—a total of 104 recoveries.

In all instances where the person has had ten attacks or more, Dr. Kirkbride classes the case as periodical; and, according to Dr. Ray, not one of these cases has ever been discharged as recovered from the Pennsylvania Hospital. But in all instances in which the number of attacks has been less than ten, the case is *not* periodical, and the patient really does recover from each successive attack; and, of course, when he leaves the hospital, is reported as recovered. This may be a good method of classification, but the propriety of its universal adoption is doubtful. It might lead to difficulty. Not every physician possesses that acuteness of mental vision by which, when a patient has apparently recovered from his second, third, fourth, or fifth attack, he can determine the question whether that patient is going to have,

in all, *nine* attacks, or whether, on the contrary, he will have *ten*. If he cannot decide that point, he will not be able to classify the case as periodical or not periodical; and if he cannot so classify him, he will not know whether to report him as recovered or not recovered! This would be greatly embarrassing. Again, supposing that, by a mistake not unlikely to occur, he should report a patient as recovered *nine* times in succession, and the patient should then have a *tenth* attack. Another embarrassment, from which there would be no relief but by letting those nine recoveries (like the sick man's reconciliation with his neighbor, in case the sick man should recover) "go for nothing," inasmuch as that tenth attack has proved that they were *not* recoveries! It is even somewhat singular that, of the no inconsiderable number of periodical cases at the Pennsylvania Hospital, not one of them has had less than ten attacks. It might reasonably be supposed that there would be at least one or two not farther advanced than the seventh or the eighth attack.

In allusion to my remark, that "if a person have a thirty-third *attack* of disease, it necessarily follows that he had previously recovered from thirty-two attacks," my reviewer exclaims, "This is a tremendous jump at a conclusion based on the vague signification of a single word." My impression is, that if, to one hundred physicians, it were asserted that a person has had *five attacks* of insanity, the instant inference of ninety-and-nine of those physicians would be, that the person had recovered from each of the first four attacks. The hundredth and exceptional man would probably be Dr. Ray. But, be this as it may, it is questionable whether the two con-

testants in this matter are quite old enough to begin to accuse each other of exalted skill in gymnastics. For one, I am perfectly willing that the audience shall decide which of the two was the greater leap, mine, in drawing the inference as expressed in the above quotation, or Dr. Ray's, in bounding from the beginning to the end of my essay, and mistaking one of my conclusions for my premises.

In all that I have written upon the controverted subject under consideration, I have intended constantly to represent, as a dominant idea, that public opinion has been greatly misled by the method of reporting recoveries at the hospitals. Dr. Ray comes to my assistance in the pamphlet before me, from which I make the following extract, the last two of the three series of italics being mine :

"It may well be doubted whether the terms *recovered*, *improved*, *much improved*, have been of any use not more than balanced by their *inevitable tendency to mislead the reader respecting the curability of insanity*. But the public have always wished to know particularly what the hospitals were doing, and, as often happens, thought that the information sought for was to be found in a *parade of vague general expressions*."

Finally, so far as regards Dr. Ray's essay, it is maintained and submitted that *not one of the seven conclusions in Study First is either refuted or in any wise weakened by anything in the "Recoveries from Mental Disease."*

SUPPORTERS.—Under the peculiar circumstances by which I was environed at the time of the original publication of the First Study, and which still exist to a

certain extent, I have considered it justifiable to publish some of the comments which it has elicited from its readers. To those already given in the preceding pages are now added a few, selected from those which have been received within the last year, and several of them suggested by the Study which was written in 1878. I do it the more willingly in consequence of the interesting and valuable suggestions contained in some of them. No one of the writers resides in Massachusetts, and only two of them in the New England States.

"I am greatly pleased," writes a physician who is a member of the board of trustees of a large State hospital, "with the proofs you have given that the per cent. of cures of the insane has been greatly overrated. There is indeed a wide distinction to be made between the cures of *cases* and the cures of *persons*."

The superintendent of a hospital in a remote State says, "I thank you for the result of your studies on the curability of insanity, as indicated by statistics. Your discoveries, I confess, were startling, and though a little unpleasant, are strongly supported by facts."

A physician in general practice, but who has been connected as assistant-physician with two of the State hospitals, writes as follows:

"Your pamphlet on the curability of insanity I wish particularly to thank you for. The picture you draw is dark, but gives intense satisfaction by the careful and truthful way in which it is drawn. If you cannot always cure, you *do* give much relief, and make hundreds comfortable who would otherwise have lived most wretched, much abused lives. Not only would I thank you for the courtesy itself, but also for the labor which

you took upon yourself to present the truth to us in so comprehensible a form."

The next extract needs no introduction or explanation :

"After seven years on our Board of Charities and Corrections, on my second year of a new six years' term, not once have I had such clear exposition of my views of insanity, and practical views in reports of cures, etc., as in your '78 report,"—Study Third.

"As to the curability of insanity," says a physician greatly interested in the subject, but never engaged in the practice of the specialty, "I worked out a part of the problem a few years since, but did not dare publish my results, as I knew that, not being in an insane asylum, they would be scouted. The Australian illustration is startling; but then look at the recoveries in our city asylums, like New York and Flatbush and Philadelphia."

There is great good sense in the subjoined remarks of a physician who has not only read extensively, but thought profoundly, upon the whole subject of mental disorders and their treatment:

"The views you have presented so ably, and confirmed by such irrefragable testimony, cannot fail of having a powerful effect in stimulating the profession to seek for better methods for the treatment of the insane. It seems to me that there has been progress made in the pathology of insanity, though I am afraid very little in the treatment. Suppose we were to revert to the earlier practice in part, giving the patient less of cossetting and coddling, and more of open-air life and actual employment for his muscles in daily toil, where there is a pos-

sibility that he can endure it. . . . I have no sympathy with the mere theorists who are demanding constantly that we should have institutions established here on the model of Gheel, for they do not know what they are talking about; but this increasing incurability of insanity, with the constant increase in the number of the insane, is an opprobrium on the skill and ability of the profession which should be removed if possible. Lectures and processional walks, and chemical experiments, libraries, etc., are all very well in their way, but the *amusement* which appeals most powerfully to the insane patient is labor according to his strength; especially if he is to be paid for it. . . . I am aware that, with your large and admirably managed farm, and your other appliances, you are doing much in this way; but, with your severe winters in Massachusetts, is it not possible to do more in your workshops? I want to ask that you, who have had the courage to show the lack of success of the past treatment of the insane, should demonstrate, as I believe you can, that there is a better way, not by establishing a commune of the insane, not by the cottage system, but by a more thorough open-air treatment and the successful extension of active employment."

A fit conclusion is found in the views of Professor Ordronaux, who is a teacher of psychology in its legal relations, as well as Commissioner in Lunacy of the State of New York:

"You have presented some very striking statistics in relation to the mistaken curability of insanity. Our pathological investigations all tend to show that nerve-tissue is among the slowest to repair its lesions, and that,

even in cases of supposed repair, the quality of the new tissue is so far inferior to the original, that all functions dependent upon it must forever after be performed in a less perfect way. Under the shadow of these natural laws, it seems to me that much of what we call '*recovery*' from insanity, consists only in a diminution of its most salient and obtrusive features, and that there remains behind a permanently weakened brain, ready to give way under any exceptional strain."

STUDY FIFTH.

(WRITTEN IN 1880.)

NEAR the end of the First Study are seven *conclusions*, in the form of propositions, which it is believed are legitimate deductions from the preceding argument. It is now proposed to show, as nearly as possibly can be shown, by *direct evidence*, that each of those conclusions can be proved to be true, beyond all cavil or dispute, to any candid mind.

CONCLUSION 1.—The reported recoveries from insanity are increased, to an important extent, by repeated recoveries from the periodical or recurrent form of the disease in the same person.

Many proofs of this are given in the First Study, but here we will present only five, some of which have been obtained since that Study was originally published :

At the Frankford Asylum . . .	5	persons recovered	52	times.
Hartford Retreat . . .	5	"	54	"
Bloomington Asylum . . .	10	"	122	"
Worcester Hospital . . .	10	"	136	"
Concord Asylum . . .	10	"	120	"
Consequently, the . . .	40	"	484	"

The number of *recoveries* is more than *twelve times as large* as the number of *persons* that recovered.

CONCLUSION 2.—The recoveries of *persons* are much less numerous than the recoveries of *patients* or *cases*.

This is proved by the same statistics as conclusion No.

1. The number of *persons* is *less than one-twelfth* of the number of *recoveries*,—each *recovery*, of course, representing a *patient*, or a *case*.

CONCLUSION 3.—From the number of reported recoveries of *cases*, or *patients*, it is generally impossible to ascertain the number of *persons* who recovered.

This, also, may be proved by the same statistics. The four hundred and eighty-four *recoveries* were published merely *as* recoveries, without any explanation. Consequently no reader of them could tell how many *persons* furnished those recoveries. The natural inference was, that there were four hundred and eighty-four, whereas there were but forty.

CONCLUSION 4.—The number of reported recoveries is influenced, sometimes largely, by the temperament of the reporter, each man having his own standard, or criterion, of insanity.

This conclusion is not susceptible of absolute proof; but it is a legitimate inference from the known diversity of organization, temperament, and mental character among men. There are, however, two instances, at least, in which statistics appear to warrant the conclusion. These are the singular results, under two successive administrations at the Worcester Hospital and the McLean Asylum, as detailed in Study First and Study Third.

At the institution first mentioned, the percentage of recoveries in three years, under the first administration, was nearly twice as great as under the second; and at the one last mentioned, in seven years, it was more than twice as great, or as 221 to 100.

CONCLUSION 5.—The large proportion of recoveries formerly reported was (*a*) *often* based upon the number of patients *discharged*, instead of the number *admitted*; and (*b*) *generally* upon the results in a number of cases too small to justify the deduction therefrom of a general formula of scientific truth; and (*c*) those proportions were evidently increased by that zeal and rivalry which frequently characterize the earlier periods of a great philanthropic enterprise.

(*a*) At a large proportion of the American hospitals, forty years ago, the ratio of recoveries was calculated on the number of patients discharged.

(*b*) The most widely known of all remarkable percentages of recoveries of cases of recent insanity—those of the Hartford Retreat, in 1827—were based upon only twenty-three cases, of which twenty-two recovered; and one of the others,—that of the Williamsburg, Virginia, Asylum, in 1842,—upon only thirteen cases, of which twelve recovered.

(*c*) There are various evidences of the existence of that zeal and rivalry in the earlier history of the hospitals, which need not be mentioned here.

CONCLUSION 6.—The assumed curability of insanity, as represented by those proportions of recoveries, has not only not been sustained, but has been practically disproved by subsequent and more extensive experience.

The assumption was, that from 75 to 90 per cent. of the recent cases of insanity could be cured. The conclusion is proved by many statistics, but most especially by those of the Frankford Asylum, based upon the treatment of 1061 *cases*, treated in the course of about thirty-nine years. Only 65.69 per cent. of these *cases*

recovered. But so many of these were the repeated recoveries, on readmission, of the same persons, that the percentage of *persons* who recovered was only 58.35. Many of these were not *permanent* recoveries. The actual proportion of *persons* who, after one recovery, were never readmitted, was only 48.39 per cent.

CONCLUSION 7.—The reported proportion of recoveries of all cases received at the institutions for the insane, has been constantly diminishing during a period of from twenty to fifty years.

This conclusion is derived *solely* from the results of the table on pages 54, 55 of the First Study. In that table it is shown that, at twenty American hospitals, the average diminution of reported recoveries, in an average period of about twenty-five years, was from 46.08 to 34.26 per cent. of the admissions. So that for every hundred that recovered, on an average of twenty-five years ago, only a fraction over seventy-four (74.34) recover now.

WORCESTER STATISTICS.—In the annual report for 1878-79 of the State Lunatic Hospital at Worcester, a new table was introduced, in which is shown, among other things, how many of the patients who were discharged as recovered within the year had recovered on former admissions. Forty-seven patients were discharged recovered, but only thirty-two recovered for the first time. Five recovered for the second time, six for the third time, two for the fourth time, one for the ninth time, and one for the tenth. Thus, fifteen of these patients have already been credited with fifty-five recoveries.

But the report contains something of still greater importance. Dr. Park has continued the work, begun

several years ago by Dr. Eastman, of analyzing the 11,000 cases admitted into that hospital prior to the 28th of September, 1875. He finds that the whole number of *persons* admitted was only 8204, while the number of readmissions was 2796.

The readmissions are equal to one-fourth of the whole number of *admissions*, and to one-third of the whole number of *persons*.

The recoveries on first admission were 3191, or only 38.89 per cent. of the *persons* admitted.

The recoveries in all the readmissions were 1191, making the whole number of recoveries 4382.

Some of the *persons* who were not well when first discharged, recovered on some subsequent admission. We are not informed how many there were of these.

A series of tabular figures show how many patients were received, on readmission, each successive time, up to the twenty-third admission. The recoveries on each admission are also shown, and it is both interesting and instructive to perceive how the proportion of these recoveries increases, in direct ratio with the increase of the number of readmissions. The percentage of the recoveries, on each admission, is as follows:

1st admission,	38.89	13th admission,	66.66
2d "	36.78	14th "	88.88
3d "	46.66	15th "	57.14
4th "	45.81	16th "	75.00
5th "	55.45	17th "	66.66
6th "	61.29	18th "	66.66
7th "	61.36	19th "	50.00
8th "	60.60	20th "	100.00
9th "	62.96	21st "	100.00
10th "	62.50	22d "	100.00
11th "	61.11	23d "	100.00
12th "	71.43		

These gradually swelling percentages are caused by the repeated recoveries of the same *persons*.

The whole number of deaths was 1498, or 18.26 per cent. of the number of *persons*. This proportion is nearly three times as large as is generally shown in the annual statistics of the hospitals.

Dr. Park concludes his remarks upon the work of analysis in which he is engaged with the following paragraph:

"It is a sad, and almost cruel blow to the worth of the earlier tables of this hospital, which gave 70, 80, and even 90 per cent. of recoveries, to know that deaths occurring within a few days of admission were not taken into account at all, but stricken entirely from the reports; that many a patient who helped to swell the tables of recoveries to the large per cent. mentioned, returned again and again to this hospital, and finally died here; that many went afterwards to other hospitals, and finally died in them; and that many more, after repeated admissions to this and other hospitals, died in the town or city almshouse, having been, to take the cold, utilitarian view which is the fashion of this world, 'a burden on their own property or that of their friends, or upon the public treasury,' from the time of their first admission to the hospital to their death."

The doctor will fail to take the full advantage of his opportunity, if, before he gets through with those statistics, he does not give to the profession and the people a more valuable paper illustrative of the actual curability of insanity than any heretofore published in this country.

In reference to the above-mentioned deaths, of which

no account was taken in making up the statistics, there is an explanation which should be known. The first superintendent at Worcester openly maintained that it was unjust to both the institution and its medical officers, to throw upon it and them the responsibility or burden of a death, when they had had no reasonable opportunity to prevent that death. This argument is plausible, but it can be used only by one who contemplates the subject from a narrow and strictly professional point of view. A hospital for the insane, however, has other than mere medical relations with the people; and it would generally be regarded as the duty of its superintendent to report every case of admission and every case of discharge, whether that discharge be by death or otherwise.

A VOICE FROM ENGLAND.—At the last meeting of the British Medical Association, Dr. D. Hack Tuke read a paper before the Psychological Section of that society, "On the best Mode of tabulating Recoveries from Insanity in Asylum Reports," in which he comes essentially to the same conclusions, in respect to repeated recoveries of the same persons, that have been arrived at in what I have written upon the curability of insanity.

"All I object to," says he, "is allowing figures to go forward, year after year, to the public, representing the gross number of recoveries as the number of persons restored to society, able to resume their place as useful members of the community; for, without some clearer mode of presenting the actual facts than at present obtains, they will believe that 100 recoveries represent 100 persons enjoying the use of their reason, instead of,

in too many cases, oscillating between the world and the asylum. Then, in their ignorance of the tendency to the recurrence of insanity, they are astonished at the ever-increasing demands for new asylums, and the conclusion, out of all proportion to the fact, that there has been an increase of insanity. Nor will these misconceptions be dispelled till it is stated, in characters so legible that he who runs may read, how many of the published cures are only re-cures of relapsed cases."

The paper closes with a summary, under five heads, three of which are as follows :

"I. That the statistical tables in the reports of the asylums for the insane should contain a clear statement, not only of the readmissions (specifying the number for each person, and distinguishing between readmissions after recovery, improvement, etc.), but of the re-cures, showing separately the number of *persons* who have recovered.

"II. That the percentage of recovery given in these tables should be that of *persons* recovered, calculated on *persons* admitted.

"V. That the present plan of jumbling together, in the statistical table of recoveries, the gross number of cures and re-cures, is misleading, and occasions exaggerated views as to the curability of insanity, and proportionate disappointment when the demand is made for additional asylums."

The subjoined extract from Dr. Tuke's paper is introduced here as evidence that the experience with repeaters in recovery, in the English asylums, is very similar to that in the institutions in this country.

"I find that at the Hereford Asylum one patient was

first admitted in consequence of a fifth attack, and recovered from that, and a sixth, seventh, eighth, ninth, and tenth attack. He had slighter attacks at home, not sufficient to bring him to the asylum, in the intervals. Of this patient Dr. Chapman says, that, although counting six recoveries, he really did not recover at all. Another patient, admitted in consequence of a fourth attack, recovered from that, and from a fifth, sixth, seventh, eighth, ninth, tenth, and eleventh attack. Another, admitted for a second attack, recovered from it, and from a third, fourth, fifth, and sixth attack. Lastly, two patients, each admitted on the fourth attack, recovered from it, and from a fifth and a sixth attack. All these, and several others, Dr. Chapman has no doubt will return again and again. How can we call these 'cures'? Is it not a misnomer?"

It is now (1880) but a few months more than nine years since Dr. Chapman very courteously showed me through the Hereford Asylum, then in the process of construction, and not very nearly completed. Yet in the intervening period it has been finished and opened, and had time to make the somewhat remarkable record above related. One of its patients, as will be seen, has recovered eight times, and had recovered from three attacks before his first admission there.

Dr. Tuke gives formulas of new tables, by the use of which not only the readmissions, but the repeated recoveries of patients, will be shown. There is good reason, not alone from this paper, but by other evidence as well, to believe that the time is not far distant at which the British asylums will remedy the very obvious defect in their numerical statistics.

There is one point in respect to which Dr. Tuke's views are so fully coincident with my own, that I desire to call attention to them. Many writers, in treating of the curability of insanity, have made comparisons between that disease and others of severe form, such as fever, pneumonia, and rheumatism, maintaining that the former yields favorably to remedial treatment as often as any of the latter. Dr. Tuke says, "I cannot agree with those who hold that we should regard each cure of insanity in a patient in the same light as each cure of a physical disease,—pneumonia, for instance. . . .

. . . . "It seems to me that our experience proves but too clearly that the parallel is not a fair one, for the relapses after pneumonia and fever, when once cured, would be much less frequent than in mental disease; and the patient himself would be generally a sounder man, *physically*, in the interval, than the recovered lunatic is *mentally*. Besides, from the different functions of the organs attacked, the permanent consolidation of a portion of one lung may allow a man to perform efficiently the duties of his position in life; but the remains of an infinitesimal lesion of the brain may virtually incapacitate him from the efficient performance of his duties in the intervals between the attacks."

I gladly seize this opportunity to quote a still earlier expression of similar opinions by Dr. Strong, of the Asylum for the Insane near Cleveland, Ohio. In a discussion at the meeting of superintendents, at Providence, in 1879, he said, "That insanity has, in modern times, changed its type, to some extent at least, there can be no doubt. I fail to see, however, in its recurrence, an analogy with other diseases,—pneumonia, for

instance,—which has been claimed by some gentlemen who have already spoken. Insanity is a disease involving the brain and nervous centres,—a disease which is, to a considerable extent, *sui generis*, and will not admit of close analogy to other diseases.”

It appears to the present writer that there is about as close an analogy between pneumonia and insanity as there is between a broken bone and a broken promise.

A VOICE FROM SCOTLAND.—Within the last year Dr. W. A. F. Browne, of Scotland, has published a pamphlet entitled “The Curability of Insanity, Psychological Shadows,” which contains much that is confirmatory of the views expressed in what I have written upon the same subject.

“Every superintendent,” writes he, “must see in his registers cases which have been removed once or twice, or oftener, during the year; and I can recall one upright and distinguished member of our specialty who was found deploring the death of M. M., on the plea that for years her cure had been effected ten or a dozen times annually, and thus enormously swelled the percentages. This course was pursued in all candor and honesty, not merely as that generally, if not universally, prevalent, but because the cure was perfect, if not permanent, and because the law required it.”

In Scotland, as in the United States, it appears that among the “recoveries” at the lunatic asylums are many cases of “delirium tremens and pseudo-dipsomania.” Under the “Habitual Drunkards Act” inebriates could go voluntarily into an asylum, and leave it when they pleased. “It is known,” says Dr. Browne, “that many of these inebriates adopted seclusion as the readiest

refuge from bodily indisposition or the social consequences of their errors, so that, when the *malaise* and the repentance had evaporated, they at once returned to the world and to their wallowing in the mire, but not until they had been honored by a certificate of recovery."

In regard to the absolute curability of mental disorders, a fact or a truth not yet attained, the doctor expresses his opinion in the following words:

"It is highly probable that at the present time, as when Thurnam wrote, 'In round numbers, of ten persons attacked by insanity, five recover and five die, sooner or later, during the attack. Of the five who recover, not more than two remain well during the rest of their lives. The other three sustain subsequent attacks, during which at least two of them die.'"

And finally, the pamphlet records, in the subjoined extract, its author's verdict upon the custom formerly very prevalent in this country, and even now not wholly abandoned, of giving the percentage of recoveries on the number of patients discharged, and sometimes of deducting from the whole number of patients all cases of idiocy, epilepsy, and paralysis, and even all deaths, and calculating the per cent. of recoveries on the remainder.

"It would be an insult to our existing convictions, and to the principles, which may be now pronounced catholic, regulating the estimates of the results of treatment in nervous diseases, to point out how utterly fallacious, deceptive, and Utopian were such practices; but it is essential to our object to stigmatize them as subversive, on the one hand, of all correct notions as to

prognosis in mental disease, and, upon the other, of the remedial powers which can be exercised for its removal or amelioration."

SCOTTISH PATIENTS OF 1868.—There were 1319 new cases of insanity admitted into the asylums of Scotland in 1868. A table in the Report for 1879 of the Commissioners in Lunacy for that country, shows the number of recoveries, not only on the first admission, but on readmission, among those 1319 persons, in each successive year, to 1880.

"It appears," says the report, "that the 1319 patients admitted yielded 39 per cent. of recoveries within the first two years, and during the succeeding ten years only 16 per cent. It is to be kept in mind that one patient may yield more than one recovery, and it must not be concluded, therefore, *that anything approaching to these proportions are permanent recoveries*. Indeed, it has been ascertained that a large number of the readmissions are drawn from the recovered patients. If the whole of the readmissions came from this source, the proportion of the 1319 admitted in 1868, who had recovered and had not been readmitted up to the present time, would be only 26 per cent. It may be believed, however, that some of the readmissions were drawn from among the patients discharged unrecovered, and a further modification must be made on account of a considerable number of the readmissions referring to a comparatively small number of patients, some patients being readmitted many times during a period of twelve years."

NEW STATISTICAL TABLES.—But perhaps the occurrence of greatest importance in this direction, in the

course of the year just closed, is the adoption by the Massachusetts State Board of Health, Lunacy, and Charity, of a set of tables for the more perspicuous and more accurate presentation of the numerical records of the medical history of the hospitals and asylums for the insane which are the property of the State. This is a striking indication of practical progress; and, whether this new system of tabulation be perfect or not, it is evidently a great improvement over that which has hitherto prevailed in this country. If it have defects, time will expose them, and furnish the opportunity for correction.

These tables have been used in the preparation of the annual report of the Northampton Lunatic Hospital for the official year 1879-80, with only one regret on the part of the writer. That regret has its origin in the fact that this reformation comes from what are familiarly termed outsiders. It ought to have come from the medical profession, and not that alone, but from the specialty of psychiatry, for the use of which the tables were designed.

RECOVERED *versus* CURED.—The following extract was written nearly twenty years ago, by a physician not now in the specialty, but who, at that time, was at the head of one of the largest institutions for the insane in America. It is an exposition of his reasons for using the term *recovered* in preference to *cured*, in his records of discharge. It is a spicy argument, and reveals the fact that it is no new thing for a physician engaged in the specialty to have comparatively little confidence in many of the recoveries announced in his reports:

“We discharge *only* recovered (cured, if you will)

patients. I imagine their condition is exactly that of the cases which others call '*cured*.' I have a sort of awkward compunction in the matter; and, in writing off a patient in the column headed '*Result*,' I have felt my pen stiff when marshalling the five letters of the word 'c-u-r-e-d.'

"Topsy said she *grewed*, and was never made by any one. One of my patients once told me the devil grewed, for God was too good and wise to make such a rascal. My patients *recover*. I think '*recover*' is a neuter, or intransitive verb, meaning *to grow well*, or perhaps, oftener, only *to grow better*; therefore it meets my requirements of conscience better than the word '*cured*,' which, being capable of a passive conjugation, insinuates that an intelligent agent has effected the change. And, further, these *cured* lunatics have such a mischievous trick of going mad again, some sooner, some later, and some oftener than others,—though some not at all,—that one feels a little timid to offer to the indiscriminating a word which they regard in a more unconditional signification than our specialty may do.

"If I take to a watchmaker, for repair or adjustment, a watch which I know is radically bad, I do not exact from him establishment of perfect performance, but am content with restoration to its primary capability. If this is curing my watch—cured it is; but I will be content to regard it as mere recovery (not, however, spontaneous) of its prior constitutional abnormality."

INSTRUCTIVE STATISTICS.—I have received some information in regard to one hundred and eighteen cases of insanity which have been treated in American hospitals, and the statistics of which have been published,

in the usual manner, in the annual reports of those institutions. Singularly enough, all the patients were females. They are here presented in a group, for a purpose which will be perceived by any person who carefully reads the whole of this article.

If Dr. Todd's well-known group of twenty-three cases at the Hartford Retreat, and Dr. Galt's group of thirteen cases at Williamsburg, Virginia, were sufficient in number to justify the inferences in regard to curability which were drawn from them, and which were largely influential in establishing a prevailing belief, then may we safely be permitted to derive some inferences from this group, which is more than three times as numerous as both of them.

Age on Admission in 118 cases of Insanity in Females.

AGE.		CASES.	
From 26 to 30 years, inclusive	. . .	1	
31 to 35 " "	. . .	2	
36 to 40 " "	. . .	2	
41 to 45 " "	. . .	3	
46 to 50 " "	. . .	17	
51 to 55 " "	. . .	13	
56 to 60 " "	. . .	30	
61 to 65 " "	. . .	7	
66 to 70 " "	. . .	25	
71 to 75 " "	. . .	11	
Unknown . . .	. . .	7	
Total . . .		118	

Inferences.—Insanity in females under forty-five years of age is very rare, but it prevails to its greatest

extent among those who are from forty-five to sixty years old. It is also very frequent between the ages of sixty-five and seventy-five years.

Age at First Admission.

AGE.					CASES.
From 26 to 30 years	.	.	.	.	23
41 to 45	"	.	.	.	59
46 to 50	"	.	.	.	36
Total					118

Inferences.—Of the three quinquennial periods in which all first admissions of insane females into hospitals take place, the period from forty-one to forty-five years of age, inclusive, furnishes the largest number. They are less frequent, though still numerous, from forty-six to fifty years, and least frequent from twenty-six to thirty years.

MARITAL RELATIONS.—It is a remarkable fact that, in all of these one hundred and eighteen cases, the patients were married.

Inferences.—Marriage is, in females, a most prolific cause of insanity. Mental disorders are apparently unknown among unmarried women.

Occupation, or Industrial Relations.

					CASES.
Manufacturer's wife	.	.	.	.	59
Farmer's wife	.	.	.	.	36
Housekeeper	.	.	.	.	22
Seamstress	.	.	.	.	1
Total					118

Inferences.—Of all females, the wives of manufacturers are the most prone to become insane. The wives of farmers are likewise greatly liable to the disease, and housekeepers suffer largely from the malign influence. Seamstresses have been known to become insane, but very rarely. In all other positions in society it would appear that females are exempt from mental disease.

Results of Treatment.

	CASES.
Recovered	102
Much improved	1
Improved	5
Result not recorded	7
Unknown	2
Died	1
Total	<hr/> 118

Inferences.—Insanity in females is one of the most curable of all diseases. Of 118 patients treated in the hospitals, 102 went forth “clothed and in their right mind,” to bless their families, to make happy homes, and to become producers instead of consumers. This is equal to 86.44 per cent.

Deaths among insane females are as rare as recoveries are frequent. Of the 118 patients above mentioned, only one died. This is only .84 of one per cent. of the cases treated. In what other disease of any severity is the mortality so small?

EXPLANATION OF THE FOREGOING STATISTICS.—On the assumption that my information is correct, and I have no reason to doubt either its authenticity or its

accuracy, the foregoing tabulated figures are a true representation, so far as they go, of the history, in relation to insanity, of THREE PERSONS, all of them *married women*. The three women were admitted to hospitals a total of 118 times, and discharged as "recovered" (or under some recorded word or words which signify recovery) 102 times. Having contributed the 102 recoveries to the published statistics of insanity, one of them died, insane, in a hospital; another died, insane, at home; and the third and last, at the age of about seventy-five years, has entered an almshouse, there to spend the remainder of her days. In the future, as for many years in the past, so long as she lives, she will doubtless have from one to two attacks of insanity annually; and the probability is great that she will eventually die insane.

STUDY SIXTH.

(WRITTEN IN 1881.)

THE arguments already advanced in proof of the allegation that mental disorders are far less susceptible of cure than has generally heretofore been believed, ought to be, as to a great extent they have been, sufficient for their purpose. There is little necessity of additional evidence, either cumulative or other. Not only is the truth of the seven propositions derived as "conclusions" from my discussion of the subject five years ago becoming more and more widely recognized and acknowledged, both by the medical profession and by interested laymen, but an increasing number of the superintendents of hospitals and asylums so explain their statistics of recoveries as to give further proofs of that truth.

In his report for 1880 of the Lancaster (England) County Lunatic Asylum, Dr. David M. Cassidy records 159 patients as discharged recovered in the course of the year. In 88 of them the recoveries were from a first attack, while 66 were patients who had previously recovered from earlier attacks.

"Such recoveries," he writes, "as those in the latter category, must of course be taken for what they are worth. They are, in fact, relapsing cases, and nearly all will probably become again, more or less frequently,

asylum inmates. Nor should it be concealed that even among the eighty-eight primary recoveries many will probably relapse, and some will die insane. This suggests forcibly the consideration that the care and alleviation of the condition of the general body of the insane is at least as important a function of asylums as is the so-called 'cure' of a small percentage of cases, few of whom remain permanently sane. It also suggests the futility of making artificial distinctions between the curable and the incurable insane."

Dr. G. Mackenzie Bacon, of the Cambridgeshire, Isle of Ely, and Borough of Cambridge Pauper Lunatic Asylum, in the report of that institution for 1880, after announcing his intention to "tabulate all the readmissions" of that institution from the time of its opening, proceeds as follows :

"I feel it is only by such a method that we can arrive at the knowledge of what cases are really cured, and that it is important that asylum superintendents should know how many patients recover, in the sense of being restored to health for at least a considerable period, *and not merely how soon a recovered patient returns to the same asylum, to again go through the farce of a recovery, and be readmitted perhaps in a week or a month.*"

RESULTS, IN 1879-80, AT THE MASSACHUSETTS STATE HOSPITALS.—The adoption, last year, by all the State hospitals for the insane in Massachusetts, of the new series of statistical tables prepared by the Board of Health, Lunacy, and Charity, has given us an advantage never before enjoyed. It has enabled us to show very nearly, if not positively, just what was done by those institutions, in the course of the official year 1879-80, towards

the restoration of the insane and the diminution of their number within the Commonwealth.

At the four State hospitals, at Worcester, Taunton, Northampton, and Danvers, in the course of the year ending with September 30, 1880, the number of persons admitted was 1092,—*persons*, or individuals, be it understood, because it not infrequently happens that one and the same person is admitted more than once in the course of a year. Of this number of persons, together with those who were in the said hospitals at the beginning of the year, the number of persons discharged recovered was 283. This makes the recoveries, calculated on the admissions—the method which approximates most nearly the truth—equal to 25.91 per cent., or a small fraction more than one-fourth of the whole.

Such, then, are the results for one year at our curative State establishments. I have here stated them in the way that similar results have always, prior to the year 1880, been reported at the institutions for the insane throughout the United States. Even as so reported, giving to them all the advantage derived from a broad, general statement, with no examination into the detail of modifying facts and conditions, they yield no evidence of a great degree of curability of the insane. The curable *three-fourths* of former faith dwindles very nearly to *one-fourth* in absolute practice.

The hospital at Danvers, the newest of the four institutions mentioned, and situated nearest the populous centres of the State, received nearly all the recent cases from Boston during the past year. It probably also received all which were committed from Lynn, Salem, Lowell, and Lawrence. But as that hospital has been

only a short time in operation, I disregard it in the exposition now about to be made, and take the three other hospitals, which have been in operation different periods, varying from twenty-three to forty-eight years.

Those three older hospitals, at Worcester, Taunton, and Northampton, admitted during the official year 1879-80, 521 persons. They discharged recovered 118 persons, making a percentage of recoveries of 22.64, a noteworthy fraction less than one-fourth of the number admitted.

But let us look a little farther. The three hospitals *discharged* 118 persons recovered; but they *admitted* 55 persons whom they had *previously* discharged recovered. Consequently the actual gain, in the course of the year, of recovered persons in the community, was only 118 minus 55, which is 63. This is only 12.09 per cent., or less than one-eighth of the number of persons admitted. It is an average of 21 gained recoveries at each of three large hospitals, the average number of the patients of which was, for the year, equal to 503 for each.

A fact yet unmentioned gives, at first view, a still more discouraging aspect to the case. The 55 persons readmitted after previous recovery had been discharged recovered, not alone once each, making 55 recoveries, but a total of 115 times. The public had been told, in the reports, of 115 recoveries of those 55 persons. Hence, if *recoveries*, and not *persons*, be considered, the three hospitals issued 118; but they took back 115 which had been previously issued, leaving in the general population a gain of only three, or an average of one for each hospital.

It is not improbable, however, that the excess of *recoveries* (115) over that of *persons* (55) readmitted, was counterbalanced by a similar excess of *recoveries* over that of *persons* (118) discharged. For example, if one of the 55 persons readmitted had previously been discharged recovered five times, there may have been, among the 118 discharged recovered, one who had previously been discharged recovered an equal number of times.

The statistics just given in aggregate for the three institutions were specifically, for each one of them, as follows:

At the Worcester Hospital, the oldest of the three, although its present building is the newest, the number of persons admitted was 222. The number discharged recovered was 41, which is 18.46 per cent., or less than one-fifth of the admissions. But among the admissions were 25 persons whom it had previously discharged recovered. Hence the actual gain of recovered persons outside of the hospital was only (41 minus 25) 16, or 7.2 per cent. of the number admitted.

The 25 persons readmitted had been discharged recovered a total of 58 times.

At the Taunton Hospital, 184 persons were admitted, and 49 discharged recovered, a percentage of 26.62. Of those admitted, 19 had previously been discharged recovered, so that the gain of recovered persons in the general population was only (49 minus 19) 30, or 16.3 per cent. of the admissions.

The 19 persons readmitted had been discharged recovered 35 times.

At the Northampton Hospital, the number admitted was 115. The number discharged recovered was 28,

equal to 25.22 per cent. But of the persons admitted there were 11 who had previously been discharged recovered. The gain of recovered persons in the community was, therefore, only (28 minus 11) 17, or 14.78 per cent. of the number admitted.

The 11 persons readmitted had been discharged recovered a total of 22 times.

It is believed that, from this exposition, it will be apparent that the method still almost universally prevalent of reporting recoveries is, except in a technical or medical sense, very fallacious and deceptive; and that, until some other method, similar to the new one in Massachusetts, be adopted, those statistics will be of but little value in the study of the problems of social science.

At the Danvers Hospital, the number of persons admitted in the official year was 571. The number discharged recovered was 165, or 28.89 per cent.

The proportion of recent cases received at that institution was unquestionably, and for obvious reasons, larger than at either of the other three.

That hospital had been in operation less than eighteen months at the beginning of the official year in question; hence it could not be expected that, among the persons admitted, there should be many who had previously been discharged from it recovered. And yet there were some such readmissions—the report does not state how many; but it was of so many persons that their total of recoveries was 18.

A GLANCE AT GREAT BRITAIN.—Having shown the results at the State hospitals of Massachusetts, perhaps it may be permitted to extend our observation to some

of the similar institutions abroad, for the purpose of further illustrating the subject, as well as showing the advantages of our recently adopted method of reporting recoveries.

At the British asylums, the method of reporting the statistics has always been essentially the same as it is in the United States. We, indeed, followed their example. But it has heretofore been my impression that the proportion of patients readmitted, after having been discharged recovered, is much smaller there than in this country. I have supposed that the British patients remain longer in the hospitals than do the American, and that thus their recoveries are so confirmed that relapses, or subsequent attacks, are comparatively infrequent. From information recently received, I infer that, at least to a certain extent, I was mistaken, and that there is no very great difference in these respects between the two countries.

Dr. Clouston, of the Royal Edinburgh (Morningside) Asylum, in his report for 1880, has introduced tables by which the same light is thrown upon his statistics of recoveries as upon those of the Massachusetts institutions by the new and recently adopted method of reporting, with the exception that he does not clearly discriminate between *cases* (or *patients*) and *persons*.

The admissions at Morningside, in 1880, were 347. Of these *patients*, the number suffering from the

First attack of the disease was	.	.	231
Second attack	.	.	58
Third attack	.	.	24
Had had several attacks	.	.	26
Congenital	.	.	8

Hence it appears that, of the 347, no less than 108 (58 plus 24 plus 26), or nearly one-third of the whole, were admitted after recovery, either at Morningside or some other place, from one or more former attacks.

The number of patients *discharged*, recovered, was 165. Of these, there were who

Recovered for the first time in 1880	. 97
Had recovered in former years	. 63
Recovered more than once in 1880	. 5
Total	<hr/> 165

At the close of the year no less than nine of these had already been brought back to the asylum, and still remained there or had been removed *unrecovered*.

No less than forty per cent., or four in every ten of the recoveries, were of persons who had had previous attacks from which they had recovered.

The movement of the population at the Morningside Asylum is rapid. Many of the patients apparently remain in the institution but a comparatively short time. For these reasons it is believed that the proportion of patients returning to it, after having been discharged recovered, is larger than at most of the British Asylums.

In his report for 1880 of the Derbyshire (England) County Lunatic Asylum, Dr. J. Murray Lindsay states that in twenty per cent. of the admissions "there had been previous attacks of insanity." At the Richmond District Asylum, Dublin, Ireland, in 1880, the admissions were 420, of which 65, or 15.47 per cent., were "relapsed cases." The number discharged recovered

was 167; but the gain of recovered persons in the general population was only 102 (167 minus 65).

THE BRITISH MEDICO-PSYCHOLOGICAL ASSOCIATION. —The most striking evidence of progressive thought relative to the general subject under consideration, is the fact that, at the annual meeting of the British Medico-Psychological Association, which was held in London in August last, the statistical committee of that society recommended for adoption some new tables, as well as alterations in some of those already in use, so modifying the series, as a whole, that the statistics of the Asylums can be reported with essentially the same detail, and the same perspicuity in regard to recoveries, as is found in the new tables of the institutions in Massachusetts.

After a brief discussion, it was decided to postpone for one year the question of their adoption, for the purpose of giving the members an opportunity to study them, and to discuss their merits at the quarterly meetings. But there can hardly be a doubt as to the result. The proposed alterations will be adopted. In the present state of things—when, in consequence of the existence of various organizations for the promotion of the objects of social science, the call, outside of the profession, for information in regard to insanity is tenfold greater than it was forty years ago—the members of the British Association cannot afford to refuse to display their statistics in such manner as will render them valuable to the members of those organizations. The present *technical* truthfulness of those statistics must be expanded into an *absolute* truthfulness, in regard to the relation between the disease and individuals, or the

most important part of the statistics themselves will soon become entirely, as they even now are essentially, valueless. Dr. Clouston is not going to recede from the position gained by the step in advance taken at the time of making the report just passed under review,—a position in which he could show not alone what his institution had accomplished during the year in relation to *disease*, but also to what extent its beneficial influence had affected his *fellow-men*. There are many others among his colleagues in the specialty in England and Scotland, who are even now ready to follow his example. The rest will doubtless mostly be ready at the expiration of the appointed year. Let them remember that, no less than forty years ago, a reformation in the statistics of insanity was called for by an Englishman whose keen and comprehensive intellect and whose soundness of judgment were second to those of no one of his countrymen who have written upon the subject. I allude to the late Samuel Tuke. In the thoughtful and excellent article used as an introduction to his translation of Dr. Maximilian Jacobi's treatise on the construction and management of institutions for the insane, he wrote as follows :

“The whole subject of the mode of reporting the results of our institutions for the insane calls loudly for attention, if we would arrive at any useful statistical comparisons as to the effect of treatment and other circumstances on the health of the patients, and in regard to the cure of this greatest of human maladies. The subject would not be unworthy of a special consultation among the professional men who are devoted to this department of the medical art.”

Is it not apparent, from the very wording of this extract, that its author had in view the specific changes—perhaps with others—which it is intended to accomplish by the adoption of the proposition now before the Medico-Psychological Association? Shall his suggestions be permitted to lie under the dust and ashes of a half-century before they are carried into effect?

OLD BUT VALUABLE GERMAN STATISTICS.—At the Siegburg Asylum, in Rhenish Prussia, an institution which at that time was under the superintendence of Dr. Maximilian Jacobi, the statistics of recoveries from January 1, 1825, to December 31, 1845, a period of twenty-one years, were as follows:

	Men.	Women.	Total.
Whole number recovered	377	284	661
Living at the end of the period, and have had no relapse	169	153	322
Relapsed, and recovered again at the Asylum	79	48	127
Relapsed and not yet cured	5	6	11
Relapsed and become incurable	34	30	64
Relapsed and died insane	39	18	57
Died without a relapse	43	25	68
Not heard from	8	4	12

The number of patients admitted in the course of the period is not given, and consequently the percentage of recoveries cannot be obtained. The statistics are valuable chiefly for the purpose of ascertaining to what extent the recoveries were permanent.

At the time of the close of the twenty-one years, 259 of the 661 persons had "relapsed," or, as it is generally stated in this country, had had a second attack. This is equivalent to 39.1 per cent., or a slight fraction less

than two-fifths of the whole. But these are not *final* results. Within the *ten years next following the close of the period* the number of relapses would be large, especially among the patients who recovered in the last half of the period. If about *two-fifths* of the whole relapsed *within* the period, it appears perhaps more than probable that *one-fifth* (or half as many more) would relapse *afterwards*. Supposing this estimate to be accurate, the whole number of persons relapsed would be equal to three-fifths of the whole number of persons recovered. This corresponds with Dr. Thurnam's well-known formula.

In regard to the proportion of the persons recovered who would ultimately die insane, it will be perceived that, at the close of the period, it was still too early to furnish the data for a very accurate estimate. Something, however, in that direction may be done. Already the number who had relapsed and died insane was 57. The number who had relapsed and become incurable, and who would consequently die insane, was 64. This gives a total of 121, or a little less than *one-fifth* of the whole, whose deaths, while insane, were assured. According to the above-mentioned formula, *two-fifths* of the whole should die insane. Hence we must find a little over *one-fifth*, or in actual numbers 143, *more* who would die insane. These must be looked for, first, in the 322 who had not relapsed, but many of whom undoubtedly would relapse; secondly, in the 127 who had relapsed and recovered again, and, judging by what we know in regard to the liability to repeated relapses, a very large proportion of whom would relapse again; and, thirdly, in the 11 who had relapsed,

and were not yet cured. Of these 460 persons, it is not improbable, judging from what we have already learned from similar statistics, that as many as 143 would die insane.

AN ECHO FROM THE ANTIPODES.—There are two lunatic asylums in South Australia. They are under the general supervision of a board of visitors, of which Dr. Alexander S. Paterson is chairman. The report for 1880 of this board, signed by the chairman as colonial surgeon, is before me. It deals with the subject of recoveries with a commendable extent of detail, although it fails to discriminate between *persons* and *cases*, and to give the number of attacks and of recoveries of those patients who have been readmitted after recovery.

At the two asylums, Adelaide and Parkside, the aggregate number of admissions in 1880 was 223. The number of patients discharged recovered was 90, which is equal to 40.35 per cent. But of the patients admitted, there were 35 who had previously been discharged recovered. The two institutions gave to the people 90 recoveries; but they received back from the people 35 former recoveries. Therefore, the gain of recoveries among the people was (90 minus 35) only 55. This is 24.66 per cent. of the admissions.

Five of the patients readmitted returned to the hospital within a month from the time at which they were discharged recovered.

As might be expected, in a country so recently settled as South Australia, a large proportion of the recoveries were from cases originating in intemperance. In no less than twenty-five cases of males, the form of the

disorder is called *alcoholismus*. The patients recovered in twenty-four of them. Eight of these were in the asylum less than a month each; and the average time of treatment of the twenty-four was only one month and seven days.

ATHENIAN SUCCESS.—I now approach a section of this Study from the consideration of which I would gladly be released; but, in the discussion of this subject, it is proper that all fallacies should be exposed, and all sources of error pointed out. Neither fallacies nor errors are justifiable in the domain of science. Furthermore, I have been criticised for the assertion, in the pamphlet on the Curability of Insanity (Study First), that the medical officers of institutions for the insane are men "with like passions as other men," and therefore the introduction here of any evidence that sustains the truth of the assertion, is due to the spirit of even-handed justice.

That the reader may enter more intelligently upon the matter, it may be remarked that, in Ohio, the superintendents of the State institutions for the insane are among those persons whose offices are the "spoils" which, according to the ethical code of partisanship, belong to the victors in politics. The mere statement of this fact is sufficient for the present purpose. Any attempt to present, in detail, the evils consequent upon such a state of things, would be irrelevant.

In his report for 1880, of the State Asylum for the Insane at Athens, Ohio, Dr. H. C. Rutter, who had but recently been appointed to the office of superintendent, mentions the discussion of the curability of insanity begun in the reports of the Northampton Lunatic Hos-

pital; and, after stating that it has been taken up by alienists all over the world, gives the following confirmatory evidence of the truth of one of my "conclusions":

"It has frequently happened that the same person has been discharged more than once during one year, and that each discharge has been reported as a separate cure. One person in Ohio is reported to have recovered seven times in one year, and while he figured in the annual report as seven 'recoveries,' was actually a patient in one of the wards at the time the report was made out."

After some further remarks he proceeds as follows:

"It has also been charged that these 'cures' are flexible, and can be increased by the superintendent whenever occasion arises to prove his superior fitness and qualifications as a specialist. This charge has been made repeatedly, and by many distinguished members of the profession, who have been disgusted with the idle talk about cures made by political superintendents, for the purpose of gaining cheap notoriety through the secular press. We have, perhaps, felt this in Ohio to a greater extent than in almost any other State in the Union. To show that these charges are not made without some foundation, and that some reason for the demand that is being pressed for a reform in our asylum statistics does exist, I will quote some interesting cures from the general register of this asylum.

"During the two years previous to May 20, 1880, we find among the 'cures' the following remarkable cases. I quote from the male register, and presume the female register shows an equal proportion of remarkable cures:

						CURES.
" " Duration of insanity over 50 years						1
"	"	"	"	20	"	6
"	"	"	"	18	"	3
"	"	"	"	15	"	3
"	"	"	"	12	"	3
"	"	"	"	6	"	16
Total over six years . . .						32"

Thus, in the course of two years, and from the men's department alone, thirty-two cases were discharged as recovered, in no one of which had the disease existed less than six years. In one it had existed fifty years; and the average duration for the whole was more than twelve years. "Four of these," continues the doctor, "were cases of chronic dementia; four were epileptic, with duration of insanity ranging from seven years to twenty-one years."

No man who has had any considerable experience in a hospital for the insane can fail instantly to perceive the preposterous absurdity of such statistics as these. By a probably low estimate, there are now in the public institutions of Massachusetts not less than fifteen hundred insane persons who might be set at liberty and reported as "cured," or "recovered," with as much propriety as were those thirty-two patients at the Athens Asylum. But by those thirty-two cases, together, undoubtedly, with similar ones from the female department, the superintendent increased the proportion of his "cures" to 63.50 per cent.

I am still of the opinion that "the medical officers of institutions for the insane can claim no exemption

from the common weaknesses of human nature;" that "they are men with like passions as other men," and that the degree of confidence which is to be placed in their statistics depends, to a large extent, upon the temperament and character of the person from whom they come.

STUDY SEVENTH.

(WRITTEN IN 1882.)

ONE of the consequences of the publication of the articles on the Curability of Insanity, in the annual reports of the Northampton Lunatic Hospital, for the years 1876, 1877, and 1878, was the conviction, in the minds of the members of the State Board of Health, Lunacy, and Charity, of Massachusetts, that the long pursued method of reporting the statistics of the hospitals of the insane was so imperfect, in some respects, as to deceive rather than to enlighten the mind of the reader.

Desiring to test, so far as possible, by new statistics, the main question in regard to curability, as well as to place the institutions of the State upon the right road toward the attainment of truth, that board, in 1879, procured the preparation of an almost entirely new series of tables, and recommended their adoption in place of those formerly used. The proposition was immediately acceded to, not alone at the four State hospitals, but at the McLean Asylum and the City Asylum of Boston.

The reports of two official years since that time have been published, and those of the third, which has just expired, will doubtless be in print before the 1st of

January, 1883. We have already, then, in Massachusetts, the results of a three years' experience under the new order of things which was introduced by the adoption of the tables mentioned. That period is sufficiently long to furnish material from which, as premises, conclusions entitled to a very considerable degree of confidence may be drawn. Drs. Park, Brown, and Goldsmith, of the three hospitals at Worcester, Taunton, and Danvers respectively, have very courteously furnished me, in advance of publication, with the statistics of those institutions for the year recently elapsed. I propose to pass in review this new material from the four State establishments, and endeavor to ascertain its teachings.

It should be stated that the figures of the statistics relate to *persons* and not to *cases*, the same person not having been counted twice within either year, whatever might have been the number of his admissions. It is possible that, in a few instances, the same person was admitted in more than one of the years; but, if any such there were, the number is not sufficient materially to affect the results.

1.—ADMISSIONS OF PERSONS IN THREE OFFICIAL YEARS.

HOSPITALS.	1879-80.	1880-81.	1881-82.	Totals.
Worcester.....	222	237	304	763
Taunton	184	267	287	688
Northampton	115	120	119	354
Danvers.....	571	488	507	1566
Totals.....	1092	1112	1167	3371

The principal value of this table is in its exhibition

of the progressive increase in the number of *persons* admitted to the hospitals. In the two years intervening between the first and the last report, that increase was seventy-five,—twenty in the first year and fifty-five in the second. This ratio of increase, if continued, would double the number of persons admitted as patients in 29.79, or, in round numbers, in thirty years. The population of the State is not increasing so rapidly as that, and consequently, so far as these figures are to be relied upon, the proportion of the insane committed to hospitals, as compared to the number of inhabitants of the State, is on the increase.

At Worcester there was a regularly progressive increase in the numbers admitted. At Danvers and Taunton, where fluctuations in this respect were the greatest, the admissions were largely governed by outside influences, not natural but arbitrary. The patients from Boston were sent sometimes chiefly to one of them, sometimes to the other, as circumstances determined.

2.—ADMISSIONS AND RECOVERIES OF PERSONS IN THREE YEARS.

HOSPITALS.	Persons Admitted.	Persons discharged Recovered.	Per cent. of Recoveries on Admission.
Worcester.....	763	148	19.40—
Taunton.....	688	148	21.51+
Northampton.....	354	76	21.47
Total of three hospitals.....	1805	372	20.61
Danvers.....	1566	378	24.15
Whole number.....	3371	750	22.25

The hospital at Danvers has so recently been opened that it is exceptional, in some respects, as compared

with the other three. The table is consequently so arranged that those three can be considered separately.

The proclamation, "The best authorities assert that 75 to 90 per cent. of recent cases of insanity are curable," with which, or with something equivalent, each half-fledged tyro in mental diseases formerly soared into the regions of imaginative psychology, either in his annual report, as a recently installed superintendent, or in some article upon the subject, as a pamphleteer or a writer for periodicals, is familiar to those who have read the Northampton reports, even though they may not have met it in its original places. Like the "voice of the turtle," in Palestine, in the spring-time of seasons long gone by, that proclamation was, until within the last three or four years, often "heard in our land;" but now, like the song of Childe Harold, it "hath ceased," or, at best, "has died into an echo," like his theme. Yet to him whose faith was challenged by its reiterated assertion, and whose hope was stimulated thereby into an expectation that all cases might soon be treated in their early stages, the table here presented cannot fail to be sadly and sorrowfully interesting.

It matters little what it is asserted *can* be done, so long as it is *not* done. To the philanthropist, the humanitarian, the political economist, the tax-payer, even the mere citizen, the important question is, not what is the proportion of the insane that has been alleged, on very flimsy grounds, to be susceptible of recovery, under certain given but often impossible circumstances, but what proportion of all who are taken to the hospitals

do recover and return to their homes as useful members of society?

By the table just introduced, it is shown that in the course of the three official years ending with September 30, 1882, 3371 *persons* were admitted into the four State hospitals, and 750 *persons* were discharged from them as recovered. The recoveries were 22.25 per cent. of the admissions. Hence, *not one-half, not even one-quarter*, but only *a fraction more than one-fifth* as many *persons* recovered as were admitted. In the oldest three of the hospitals, the most recently erected of which has been in operation twenty-four years, the proportion of recoveries was still smaller, being 20.61 per cent., or almost precisely one-fifth, as compared with the persons admitted.

It is not a little interesting to observe the very near approach to equality of these proportions in the oldest three of the hospitals.

At Danvers, the ratio of recovery was larger. This is sufficiently explained by the fact that, at the beginning of the period of three years, that hospital had been in operation less than eighteen months. It was not full, and it was the resort for nearly all of the recent cases of insanity from the eleven cities, including Boston, from which it is easily accessible.

For the purpose of further illustration, I here introduce a table showing the ratio of persons recovered to persons admitted, at each institution, in each of the three years, respectively.

3.—PERCENTAGE OF PERSONS RECOVERED IN EACH YEAR.

HOSPITAL.	1879-80.	1880-81.	1881-82.	For Three Years.
Worcester.....	18.46	21.94	18.09	19.40—
Taunton.....	26.62	21.34	17.72	21.51+
Northampton	24.34	16.66	23.83	21.47—
At the three hospitals.....	22.65	20.67	18.94	20.61—
Danvers.....	28.89	25.41	17.55	24.15—
At the four hospitals.....	25.95	22.75	18.34	22.25—

Perhaps the most noteworthy information derived from this table is, that at the hospitals, as a whole, there was a progressive diminution of the annual proportion of recoveries, from the beginning to the end of the period, as shown by the figures 25.95, 22.75, and 18.34. This regular but quite sufficiently rapid falling off in the proportion of persons recovered, may be merely incidental and temporary, but nevertheless it is not encouraging. The graded reduction of recoveries took place at the oldest three hospitals, but to a less extent. In the hospitals, as a whole, it was equal to 7.61 per cent. of the persons admitted; in the oldest three hospitals it was only 3.71 per cent., or a fraction less than one-half as much. The greatest diminution, equal to 11.34 per cent. of the persons admitted, was at the Danvers Hospital. The cause of this is readily understood. As the institution became filled to crowding, the current of recent cases which had been flowing to it was, to a certain extent, diverted from its course, and directed toward the other hospitals.

The largest percentage of annual recoveries at any of the oldest three hospitals, in the course of the period,

was 26.62, at Taunton, in 1879-80; and the smallest, 16.66, at Northampton, in 1880-81.

It is a delicate matter thus to bring the several institutions into the closest juxtaposition, for the purpose of a comparison of the results of their work. Were it not that I have great confidence in all and each of them, it would not be attempted. I regard these Massachusetts hospitals as among the best of their kind, not in the United States alone, but in the world; and I most conscientiously believe that they are now under a medical management so good, and so nearly equal, that any insane person who would recover at any one of them would likewise recover at either of the other three.

We now approach a part of the statistics before us, perhaps the most important as well as the most interesting of all, in consequence of their bearing upon the question of the absolute curability of mental disorders. The extreme liability to relapse of a large proportion of the cases recovered from insanity, is now very generally known. In some instances the relapse and the recovery occur so frequently that some physicians maintain that there is *no* recovery; but that the disease, during the apparently rational intervals of the patient, is merely in a state of suspense. But, in these cases, it is the almost universal practice at the hospitals, if they are discharged at the subsidence of each returning paroxysm, to discharge them as recovered. As heretofore shown, the recoveries are thus sometimes largely increased beyond the number of persons. In view of these cases, I have often been reminded of the notorious old toper, who one day greatly surprised an acquaintance by telling him that he had "left off

drinking," and when the assertion was doubted, re-affirmed its truth, declaring, as undeniable proof of the fact, that he had "left off three times" that morning.

The subjoined table shows the number of persons discharged recovered, and the number of persons readmitted, who had at some former time been discharged as recovered.

4.—READMISSION OF PERSONS FORMERLY DISCHARGED RECOVERED.*

HOSPITAL.	Persons Discharged Recovered.	Readmission of Persons formerly Discharged Recovered.	Proportion of Readmitted to Discharged.
Worcester.....	148	65	1 in 2.28
Taunton.....	148	70	1 in 2.11
Northampton.....	76	31	1 in 2.45
Totals of the three hospitals....	372	166	1 in 2.24
Danvers.....	378	66	1 in 5.72
Total of the four hospitals.....	750	232	1 in 3.23

In the return to their homes of 750 persons recovered from their insanity, the hospitals accomplished a great good. This work of beneficence was, however, as is shown by the table, in one sense partially counterbalanced by the readmission of 232 persons who had been previously discharged as recovered. The percentage of the readmissions on the discharges is 30.93. In other words, nearly one-third as many formerly recovered persons were taken back from the community as were given to it by the hospitals. At the oldest three hospitals the

* An error which, in the original publication of this Study, occurred in this table, and which consequently affected the statistics of the two succeeding ones, is here corrected.

proportion was still larger, the number of formerly recovered persons readmitted being to the number of recovered persons discharged as 45 (44.62) to 100. At the Worcester Hospital, it was a fraction more than two-fifths; at the Taunton Hospital, nearly one-half; and at the Northampton Hospital, a trifle more than two-fifths.

At the Danvers Hospital 378 persons were discharged as recovered, and only 66 formerly recovered persons readmitted. The proportion of the returned recovered to the discharged recovered, was as 1 to 5.72, or a little more than one-sixth. This, like the heretofore mentioned exceptional results at that institution, is a consequence of its newness. As before mentioned, at the beginning of the three years it had been in operation less than a year and a half, and hence there had not been time for a relapse of any of its recoveries other than in those persons whose disease recurs at short intervals. As will be seen by the table next to be introduced, the numbers of the readmitted recovered, in each of the three successive years, were 18, 17, and 31, respectively, nearly one-half of them being in the last year of the period. As the hospital grows older, this, as well as the other results in its medical history, will approximate more and more nearly those of the three other and more early established institutions.

Before leaving this special topic, it should be remarked that, although the Danvers Hospital readmitted but comparatively few of the persons whom it had discharged as recovered, yet it is highly probable that it admitted a no inconsiderable number who had previously been discharged as recovered from the other

three institutions. The early reports give no direct information upon the subject, but within four and a half months from the day the hospital was opened, no less than *forty-three* patients suffering from a *second attack* were received. It is probable that the larger part of these had recovered from the first attack at other institutions. The same may be said of the seventy-one patients with second attack admitted in the official year 1878-79, which began at the close of that period of four and a half months. Of these one hundred and fourteen patients, who knows how many had recovered once each, at either Worcester, Taunton, or Northampton? The number can be ascertained only by an examination of records.

In the first two years of the three years' period to which these statistics refer, the Danvers Hospital admitted one hundred and one patients who had been inmates of the other three hospitals mentioned, but we are not informed of the condition, in regard to recovery, in which they had been discharged from those hospitals.

5.—ANNUAL READMISSIONS OF PERSONS FORMERLY
DISCHARGED RECOVERED.

HOSPITALS.	1879-80.	1880-81.	1881-82.	Totals.
Worcester.....	25	17	23	65
Taunton.....	19	29	22	70
Northampton.....	11	10	10	31
Total of three hospitals.....	55	56	55	166
Danvers.....	18	17	31	66
Total of the four hospitals.....	73	73	86	232

Some of the most important information imparted

by this table has already been mentioned. By an examination of the figures in detail, it would appear that the number of formerly recovered persons annually readmitted is accidental, or incidental. It follows no law. There is neither a regularly progressive increase nor a regularly progressive decrease. The whole number admitted in the first year is smaller by thirteen than that of the last year; but, at the oldest three hospitals, the number in the first year was the same as that in the last year.

So much in regard to the persons who had previously been discharged recovered, but who had returned to the hospitals. It will now be shown that some of those persons had been discharged recovered more than once. This will be done by giving the number of times that all of them (232) had been so discharged.

6.—RATIO OF RECOVERIES TO PERSONS RECOVERED.

HOSPITALS.	Readmissions of Persons formerly Dis- charged Recov- ered.	Number of Times they had been Discharged Recovered.	Excess of Recoveries over Persons.	Average Re- coveries to each Person.
Worcester	65	160	95	2.46
Taunton	70	122	52	1.74
Northampton	31	66	35	2.13—
At the three hospitals..	166	348	182	2.09+
Danvers	66	67	1	1.01
At the four hospitals...	232	415	183	1.79—

Hence it will be perceived that the 232 recovered persons readmitted, had been discharged recovered 415 times. The excess of *recoveries* over *persons* is 183. At the oldest three hospitals the *proportionate* excess is

much larger. Their 166 formerly recovered persons readmitted, had been discharged recovered 348 times. The excess of *recoveries* over *persons* is 182. The number of *recoveries* is sixteen more than twice as great as that of *persons*. At the Worcester Hospital, much the oldest of the four establishments, 65 recovered persons readmitted had been discharged recovered 160 times. The excess of *recoveries* over *persons* is 95; and the number of *recoveries* nearly twice and a half as great as that of *persons*. At the Danvers Hospital the number of *recoveries* exceeds that of *persons* by only one. For reasons already given this result will be understood.

There is one supposable source of error in these statistics of repeated recoveries, and that is the possibility that a person who had been discharged recovered more than once, may have been so discharged in more than one of the three official years. If, for example, a person who had previously recovered three times were discharged recovered in the first year, making his *fourth* recovery, and being afterwards again admitted and discharged recovered, in either of the other two years, he would be reported twice in the period, once as having had *three* former recoveries, and again as having had *four*. This would make the number of his recoveries, as represented in the table, *seven*, whereas it had been but *four*. If the table contains such errors, they probably do not increase the totals of repeated recoveries to a greater extent than they are diminished by the admission of persons at Danvers who had previously recovered at the other three hospitals.

This rather minute and detailed analysis of the sta-

tistics of recoveries at the Massachusetts State hospitals, is, from my point of view, more than justified by the circumstances under which it is made. The truth of the seven conclusions which were legitimate deductions from the data which, in 1876, I was able to glean from the results of observations and experience under an imperfect method of recording such statistics at the hospitals, was widely doubted. This doubt was no especial cause for wonder, since, in some instances, those deductions differ very greatly from what, even in the minds of well-informed persons, had hitherto been regarded as the truth. To a very considerable extent the doubt has been removed by the foregoing Studies.

In Massachusetts a method of record and tabulation expressly designed for the purpose of bringing out, from the practical experience of its hospitals, the data which would prove or disprove the truth of those conclusions, has been in operation for some years. It was clearly proper that I should avail myself of the fruits of this crucial test, as I here have done. What are the results? The answer can best be made to appear by the reproduction in brief of several of the conclusions :

CONCLUSION 1.—The reported recoveries are increased to an important extent by repeated recoveries of the same persons.

This is proved by Table 6, where it is shown that at the oldest three hospitals 178 *persons* were discharged recovered 348 times.

CONCLUSION 2.—The recoveries of *persons* are much less numerous than the recoveries of *patients* or *cases*.

This conclusion is, as a proposition, the converse of the first. Hence, it is proved by the converse of the

same statistics. At the oldest three hospitals the number of recoveries of *persons* was but 178; the number of recoveries of *patients*, or *cases*, was 348, or very nearly twice as great as that of *persons*.

CONCLUSION 3.—From the number of reported recoveries of *cases*, or *patients*, it is generally impossible to ascertain the number of *persons* who recovered.

This may also be proved by the same (6) table. Under the old method of reporting in this State, as well as elsewhere, the 348 *recoveries* at the three hospitals would have been published, without giving any clue to the number of *persons* in whom those recoveries took place. By the new method that number is given, and it is found, in this instance, to be 178.

CONCLUSIONS 4 and 5 are, by their very nature, not susceptible of proof or disproof by these statistics.

CONCLUSION 6.—The (formerly) assumed curability of insanity has been practically disproved by more extensive experience.

By cumulative evidence in Table 2, that disproof is corroborated and strongly fortified. At the four hospitals, 3371 *persons* were admitted, and only 750, or a trifle over one-fifth of them, were discharged recovered. This proportion—22.25 per cent.—is much lower than was even dreamed of in 1876; and he who would then have ventured to assert that such could be the truth, would have been considered as either a Munchausen, an ignoramus, or a proper candidate for an asylum for imbeciles.

It will be perceived that this reduction of the ratio of recoveries is in part due to the rejection of the duplicate and multiple recoveries of the same person, thus

giving to each person but one recovery. For all other than strictly technical or medical purposes, this is the information wanted.

CONCLUSION 7.—The proportion of recoveries at the hospitals has been constantly diminishing, during a period of from twenty to fifty years.

These statistics cannot prove anything anterior to 1876, when that conclusion was written. But by Table 3 it is demonstrated that, in the four Massachusetts hospitals, the diminution, since 1879, has continued, the progressive reduction being represented by the consecutive annual percentages—25.95, 22.75, and 18.34. The proportion of recoveries in the year just elapsed is a little less than three-fourths as large as it was three years ago, in the official year 1879–80.

Very clearly, if insanity is to be diminished, it must be by prevention and not by cure.

With the foregoing exposition I might, perhaps, very appropriately close forever these published studies of the subject of the curability of insanity. If the arguments which have been used, and the illustrative proofs which have been adduced, in the course of a seven-years' discussion, have been insufficient to procure conviction of the truth of the conclusions published in 1876, it is not probable that anything will have power to convince. It was once intimated that there were minds which would not "be persuaded though one rose from the dead." Others like them there may be at the present time.

There is, however, one hitherto unused illustration furnished by the history of one of the American hospitals, that I cannot well forbear to adduce in the present

connection. It corroborates the testimony of the experience at the Massachusetts hospitals during the last three years, and emphasizes the force of it.

The epidemic fever of opinion in favor of "good"—thereby meaning, as practically translated—"expensive" hospitals, which raged throughout the decennium from 1865 to 1875, or thereabouts, will be but too well remembered. It left, for Massachusetts, its own elephantine monument upon Hathorne Hill, in such fashion that it is not likely soon to be forgotten by the people of the commonwealth, and, at the same time, similarly perpetuated its memory in other States. Of all the excessively costly curative institutions which were the products or outgrowths of that temporary craze, the Hudson River Hospital, at Poughkeepsie, New York, is, if I mistake not, the most remarkable for its costliness. Danvers is but a pigmy as compared with it. It was intended to be the institution of institutions, destined, so long as it might exist, to stand as a practical, and therefore irrefutable, proof that lavish expenditure upon hospital buildings can cure insanity.

That hospital was opened on the 20th of October, 1871, and its last published report covers the official year ending with the 30th of September, 1881. At the latter date it had been in operation ten years, minus twenty days.

In the course of that decennium it admitted 1671 patients, and discharged as *recovered* 353. The percentage of recoveries, as compared with the admissions, is 21.12, or a fraction more than one-fifth.

In view of this result at the Hudson River Hospital, one of the most prominent men engaged in the work

connected with the charities of the State of New York writes to me as follows: "If any additional evidence of the correctness of your conclusions in regard to the curability of insanity is needed, it is furnished in the ten years' experience of this most expensive of institutions 'established presumably for cure.'"

The very near approach to identity in the results at Poughkeepsie and at the Massachusetts hospitals, may arrest the attention of the reader. The proportion of the recoveries was:

At the Hudson River Hospital . . .	21.12 per cent.
At the four Massachusetts hospitals . . .	22.25 " "
At the oldest three Massachusetts hospitals	20.61 " "

But there is a difference in the computation of these ratios which operates pretty largely in favor of the Massachusetts institutions. The statistics of Massachusetts relate only to *persons*; those of Poughkeepsie to *patients*, or *cases*. The Hudson River Hospital gets the advantage of all the repeated recoveries of the same person, which, like all other institutions of the kind, it must have had; whereas, at the Massachusetts hospitals, these were all rejected.

Other appropriate topics, furnished by both the United States and Europe, might here be introduced, but I must pass them by, with two exceptions upon the other side of the Atlantic.

In Dr. Clouston's interesting report for 1881 of the Morningside Asylum, at Edinburgh, the recoveries for the year are reported in a manner differing from that of the next preceding year, and by that difference the report becomes more lucid. The number of admissions, in the course of the year, was 339, of which 247 were

for the first time, while 92 were readmissions. I here copy, in full, the table of recoveries :

PERSONS RECOVERED IN 1881.

	Males.	Females.	Total.
A. Recovered for the first time.....	45	48	93
(a) Readmitted, and again discharged recovered.....	.....	4	4
(b) Readmitted, but not again discharged recovered.....	6	3	9
B. Had made one or more recoveries in previous years.....	31	34	65
(a) Readmitted, and again discharged recovered.....	.....	.....	.....
(b) Readmitted, but not again discharged recovered.....	7	4	11
Number of persons recovered.....	76	82	158
Number of cases of recovery.....	76	86	162

The whole number of *persons* who recovered within the year was 158. Ninety-three of these recovered for the first time; but after their discharge as recovered, four of them were readmitted and again discharged recovered. They made two recoveries each within the year. Nine more of them were readmitted, and, at the end of the year, still remained in the asylum. Although discharged recovered, and counted among the recoveries, they came back within the year.

The remaining 65 of the *persons* who were discharged as recovered, did *not* recover for the first time; but each one of them had recovered once or more in previous years. Of these 65 who were discharged recovered within the year, 11 came back, and were still in the asylum at the expiration of the year.

Summing the two classes, it appears that of the 158

persons discharged recovered within the year, 24 relapsed and were readmitted within the year. Four of them were discharged recovered a second time within the year, and 20 (9 plus 11) were still in the asylum at the close of the year.

I have thus put the information in the table into the language of words, for the benefit of those who have no taste for the language of numerals. It is a lucid showing, so far as it goes, but it would have been more satisfactory if we had been told *how many recoveries* the 65 *persons* had made in previous years.

A series of improved and reformatory tables, by which the defects in the method of reporting the statistics of the institutions for the insane would be remedied, was prepared by a committee and presented for adoption by the British Medico-Psychological Association in 1881. After due discussion, it was decided to postpone action upon the subject for one year. At the meeting of the Association in August of the current year, there was another discussion, which ended, at length, in the adoption, *for one year*, of the new tables. So far so good—and very good. A prudent caution in driving, even when one knows he is on the right road, is commendable.

The superintendents of the British asylums will find that the new tables will increase their labors to a no inconsiderable extent; a fact of which no one perhaps is more conscious than they themselves. The work of preparing the statistics of the Northampton Hospital was increased, probably threefold, by the tables introduced three years ago. But the British superintendents have always put very much more work into their statistics

than have the superintendents of the institutions in this country; and hence their labor will not be proportionately increased. But, for them and for us, it is the end that crowns the work, and all upon whom the burden is imposed must look for their reward in the greater revelation of truth, and the immensely enhanced value of their statistics.

STUDY EIGHTH.

(WRITTEN IN 1885.)

It is proposed, in this paper, to show, by the collation of statistics, the actual results of treatment at a large number of institutions, both foreign and domestic, bringing our knowledge of such general results to a later date than that contained in any former statistical essay.

RECOVERIES AT BRITISH ASYLUMS.—The reports of many, if not most, of the British asylums contain a table, originally designed by Dr. Thurnam, in which the admissions, discharges, recoveries, and deaths of patients are classified according to the duration of the insanity.

These classes are as follows :

1st. First attack, and within three months, on admission.

2d. First attack, above three and within twelve months, on admission.

3d. Not first attack, and within twelve months, on admission.

4th. First attack or not, but of more than twelve months, on admission.

5th. Congenital and unknown.

This is a well-conceived and useful table for its intended purpose ; and if, in practice, it be filled in with sufficient care and discrimination, it cannot well fail to

throw light upon the question of curability as affected by duration, or by the fact of first or subsequent attack.

Nearly two years ago, I collated the statistics of this table in a series of the annual reports of twenty-three of the British asylums, so far as relates to all cases of less duration than twelve months at the time of admission. For more than fifty years, all such cases have, in the United States, been called *recent*, in contradistinction to those of remoter origin, which have been called *chronic*; and my object in collecting the statistics was, to ascertain the degree of curability to which those asylums had attained in the treatment of what we call recent cases.

Of each of twelve of the asylums, these statistics extend over a series of six consecutive years, the last of which was, in some instances, 1882, and in the others, 1883. At three of the asylums they extend over five years; at one, over four years; and at seven, over three years. At each asylum the years are consecutive; and at no one is the last of the series later than 1878, the majority being either 1880, 1881, or 1882.

The results of these statistics may be briefly stated:

First class (first attack, less than three months' duration), the admissions were 8316; recoveries, 4051; per cent. of recoveries, 48.71.

Second class (first attack, three to twelve months' duration), admissions 2613; recoveries, 764; per cent. of recoveries, 29.24.

Third class (not first attack, less than twelve months' duration), admissions, 4768; recoveries, 2640; per cent. of recoveries, 55.37.

By uniting the first two classes, we have all cases of

first attack and of less duration than one year. Of these, the admissions were 10,929; the recoveries, 4815; and the proportion of recoveries, 44.06 per cent.

Of the third class the admissions were 4768; the recoveries, 2640; and the proportion of recoveries, 55.37 per cent. Here we have another illustration of the fact that recovery takes place in a less proportion of cases of first attack than in cases subsequent to the first—as was demonstrated in Study Fifth.

By a union of the three classes, all of which contain, exclusively, cases of less than twelve months in duration, and are consequently here known as recent cases, we obtain the following results: Admissions, 15,697; recoveries, 7455; proportion of recoveries, 47.49 per cent.

Among this series of twenty-three asylums is the Retreat at York, the statistics of recoveries at which, from 1796 to 1819, have been quoted, ever since they were published, as one of the authorities for the eminent curability of mental disorders. It may not be uninteresting to bring into juxtaposition those statistics of three-fourths of a century ago, and those of the same institution for the five years from 1876 to 1880 inclusive. This is done in the following table:

TABLE II.—PER CENT. OF RECOVERIES AT THE YORK RETREAT OF CASES OF LESS DURATION THAN TWELVE MONTHS.

	Per cent. of 1st Class.	Per cent. of 2d Class.	Per cent. of 3d Class.	Per cent. of Total.
1796-1819.....	85.10	55.55	61.76	68.25
1876-1880.....	50.00	42.86	36.11	43.30
Decrease of per cent.....	35.10	12.69	25.65	24.95

The diminution of the proportion of recoveries on the admissions is, for the first class, 35.10 per cent. of the admissions; for the second class, 12.69 per cent.; for the third class, 25.65 per cent.; and for the whole, 24.95 per cent., or, in round numbers, one-fourth of the admissions.

The proportion of diminution from the actual recoveries of the first period, is, for the first class, 41.17 per cent., or a fraction more than two-fifths; for the second class, 22.84 per cent., or a fraction more than one-fifth; for the third class, 41.53 per cent., or a fraction over two-fifths; and for the whole, 36.25 per cent. In other words, for each hundred of recoveries of what we call recent cases, three-fourths of a century ago, there are but sixty-four (63.75) recoveries now.

Some months after the collection of the foregoing statistics, but before any use had been made of them, Dr. T. A. Chapman, of the Hereford Asylum, England, published a similar but much larger collection, in the *Journal of Mental Science* for July, 1884. It contains the statistics of "Forty-six English County and Borough Asylums, and the Edinburgh and Glasgow Royal Asylums, for (in most instances) eleven years, 1872 to 1882 inclusive." Here is a collocation of the remarkable number of 93,443 cases of insanity, all of them classified as in the foregoing table. The whole number of recoveries was 35,468, or 37.95 per cent. of the admissions. But as the recoveries of *recent* cases are now alone under consideration, we will turn our attention especially to them. The subjoined table (III.) shows the numbers, and the percentage, in each of the first three of Thurnam's classes.

TABLE III.—RECOVERIES OF CASES OF LESS DURATION THAN ONE YEAR.

CLASSES.	Admissions.	Recoveries.	Per-cent. of Recoveries.
<i>I.</i> First attack; less than three months' duration.	38,283	18,654	48.72
<i>II.</i> First attack; three to twelve months' duration.	12,126	3,421	28.21
<i>III.</i> Not first attack; less than twelve months' duration.....	19,574	10,494	53.61
Totals and mean per cent.....	69,983	32,569	46.52

Dr. Chapman's table includes, apparently, twenty-eight asylums that are not in mine, and mine has five that are not in his. Of these five, two are in Scotland and three in England, the Retreat at York being one.

In regarding these two collections of statistics, so much alike and yet so different, almost the first impression received from them is the striking similarity of results. These are, indeed, so nearly identical as to justify one's faith in the sometime possibility of a close approximation to accuracy in this branch of vital statistics. The difference in the proportion of recoveries, as indicated by the two, are, for the first class of cases, only .01 of one per cent.; for the second class, 1.03 per cent.; for the third class, 1.76 per cent.; and for the total, .97 of one per cent.

When Dr. Woodward, in 1833, took charge of the Worcester Hospital, he had before him, as exemplars, three well-known pioneers in the field of high percentages of recoveries. Dr. Burrows, in 1820, had reported

91.32 per cent. as the result of the treatment of 242 cases, of which 221 recovered. He also published the results, from 1797 to 1819, at the York Retreat, where, of 47 cases of less duration than three months, the recoveries were 40, or an equivalent of 85.10 per cent.* In 1827, Dr. Todd, at the Hartford Retreat, reported that, of 23 recent cases admitted, 21 had recovered, a proportion of 91.3 per cent. In 1841, Dr. Woodward obtained his highest proportion of recoveries, 91.42 per cent., by the treatment of 70 cases, 64 of which recovered; and in 1842, Dr. Galt, at the Williamsburg (Virginia) Asylum, excelled all of his predecessors in the announcement that, of 13 recent cases under his care, 12 had recovered, a percentage of 92.3.

Here we have five different, well-known medical authorities, each confirmatory and corroborative of the others, and all of which have, for an average of half a century, been regarded as a kind of oracular proclaimers of the possible achievement of recovery in about 90 per cent. of recent cases. Yet, singularly enough, the whole of the five separate reputations were built, and the oracles established, upon the treatment of an aggregate of only 395 cases.

On the other hand we have before us, in Dr. Chapman's table, the results of treatment of a number of recent cases which lacks but seventeen to make it seventy thousand, and the recoveries are only 32,569, or 46.52

*The fact should not be overlooked that, if the word *recent* be used in its American signification, applying to all cases of less duration than one year, the proportion of recoveries at the Retreat was only 68.25 per cent., the admissions being 126, and the recoveries 86.

per cent. This ratio of curability is only eighty-six hundredths of one per cent. more than half as large as that which was claimed by Dr. Burrows, and only thirty-seven hundredths of one per cent. more than one-half as large as that of Dr. Galt. Even in the cases of first attack and of only three months' duration, of which there were 38,283, the recoveries were but 18,654, or 48.72 per cent. In the light thrown upon the subject by this unparalleled collection of recent cases, what becomes of the once exceedingly fashionable assertion that "from seventy-five to ninety per cent. can be cured"?

RECOVERIES AT THIRTY-NINE (15+24) AMERICAN INSTITUTIONS.—Inasmuch as neither Thurnam's table, nor its equivalent in any other form, is used at the American institutions, it is impossible to group or to analyze the results at the latter on precisely the same basis in all respects. Nevertheless, upon looking over the American reports, I find that a large amount of matter may be brought together, illustrative of the proportion of the reported recoveries of recent cases.

In the statistics of a majority of our hospitals, although in reference to admissions the duration of the insanity is given, and hence a distinction between recent and chronic cases rendered possible, yet no such discrimination is made in regard to patients discharged. The subjoined table contains the results, in regard to recovery, for a series of from three to six years, of fifteen American hospitals, in the reports of which the recoveries of cases of less than twelve months' duration are numerically given. The time during which each hospital, respec-

tively, furnished these statistical results, is mentioned in the table.

TABLE IV.—WHOLE NUMBER OF RECOVERIES, AND RECOVERIES OF CASES OF LESS THAN TWELVE MONTHS' DURATION, AT FIFTEEN AMERICAN INSTITUTIONS.

HOSPITALS.	Year.	ADMISSIONS.		DISCHARGED RECOVERIES.				
		Under twelve Months.	Whole Number.	Under twelve Months.	Percent of Recent Cases.	Whole Number.	Per cent. of Whole Number.	Per cent. of all Recoveries on Recent Admissions.
Elgin.....	6	488	1,017	197	40.37	246	24.19	50.41
Concord	5	334	536	148	44.31	161	30.04	48.20
Worcester.....	5	598	1,254	191	32.21	254	20.26	42.83
Taunton.....	5	824	1,619	300	36.41	369	22.79	44.78
Utica.....	5	1518	2,184	661	43.54	716	32.78	47.17
Harrisburg.....	5	895	716	117	29.62	133	18.58	33.67
Dixmont.....	5	646	1,117	238	36.84	288	25.78	44.58
Dayton.....	5	607	977	285	46.95	342	35.00	56.34
Ossawatimie.....	5	398	707	165	41.46	217	30.69	54.52
McLean	4	207	808	81	39.13	89	28.90	42.99
Northampton.....	4	224	511	75	33.48	104	20.35	46.43
Danvers.....	4	962	2,078	361	37.53	458	22.04	47.61
Columbia, S.C.....	4	408	702	110	26.96	161	22.93	39.46
Boston.....	3	174	275	66	37.98	80	29.09	45.98
Winnebago.....	3	285	561	117	41.05	162	28.88	56.84
Totals and mean per cent.....	68	8063	14,562	3112	38.59	3780	25.96	46.88

The aggregate of the admissions of all cases is 14,562; the aggregate recoveries, 3780; and the proportion of recoveries, 25.96 per cent. The largest proportion was 35 per cent., at Dayton; and the smallest, 18.58 per cent., at Harrisburg. At five others it was less than 23 per cent., and at still five others less than 30 per cent.; while at three besides Dayton, it was over 30 per cent.

The aggregate of admissions of recent cases is 8063;

that of recoveries of recent cases, 3112; and the proportion of recoveries of recent cases, 38.59 per cent. The largest proportion is 46.95 per cent., at Dayton; and the smallest, 26.96 per cent., at Columbia, South Carolina. Of the thirteen others, the proportion at one was less than 30 per cent.; at two, between 30 and 35 per cent.; at five, between 35 and 40 per cent.; and at five between 40 and 45 per cent.

Finding that, in despite of the traditional "seventy-five to ninety per cent." of some of the fathers, not one of these hospitals discharged even forty-seven per cent. of recoveries of recent cases, while the mean or average of all of them was less than thirty-nine per cent., I studied the relation between the *whole number of recoveries* and the number of *admissions of recent cases*. The whole number of recoveries is larger by 668 than the recoveries of recent cases; and the number of admissions of recent cases is 6499 smaller than the whole number of admissions. Yet, strange as it may appear, the total of recoveries is only 46.88 per cent. of the admissions of recent cases! The largest proportion, 56.84 per cent., is at Winnebago, and the least, 33.67 per cent., at Harrisburg. Of the remaining thirteen hospitals, the proportion is less than forty per cent. at one; between forty and forty-five per cent. at four; between forty-five and fifty per cent. at five; between fifty and fifty-five per cent. at two; and over fifty-five (56.34) per cent. at one. Thus, after aiding and assisting the recoveries of recent cases by a supplementary and a complimentary gift of the certainly not despicable number of 668 cases, we have been unable to swell them even to fifty per cent. of the admissions of recent cases!

We now come to the hospitals which give the duration of the disease in the cases admitted, but give no such information in respect to the cases discharged. The following table includes the statistics, for a term of from three to six years each, of twenty-four institutions of this class. Of six of them the term was six years; of eleven, five years; of six, four years; and at one, three years:

TABLE V.—RECOVERIES AT TWENTY-FOUR AMERICAN INSTITUTIONS.

HOSPITALS.	Years.	ADMISSIONS.		DISCHARGES.		
		Under 12 Months' Duration.	Total Admissions.	Total Recoveries.	Per cent. of Recoveries on all Admissions.	Per cent. of all Recoveries on Admissions of less than 12 Mos' Duration.
Jacksonville, Ill.....	6	1000	1,605	440	27.41	44.00
Mt. Pleasant, Iowa...	6	852	1,548	400	25.84	46.95
Fulton, Mo.....	6	675	1,162	564	48.54	83.56
St. Joseph, Mo.....	6	435	740	257	34.73	59.08
Lincoln, Neb.....	6	414	654	267	40.83	64.49
Jackson, La.....	6	88	231	63	27.27	75.90
Hartford Retreat.....	5	300	434	150	34.56	50.00
Middletown, Ct.....	5	492	1,168	241	20.63	48.98
Middletown, N. Y...	5	503	775	300	38.71	59.64
Trenton, N. J.....	5	373	786	244	31.04	65.42
Danville, Pa.....	5	263	695	110	15.83	41.83
Williamsburg, Va....	5	165	380	171	45.00	104.00
Richmond, Va.....	5	357	559	254	45.44	71.15
U. S. Gov't Hospital.	5	549	1,099	357	32.48	65.03
Jackson, Miss.....	5	235	526	228	43.35	97.02
Cleveland, Ohio.....	5	681	1,135	414	36.48	60.79
Longview, Ohio.....	5	470	882	325	36.85	69.15
Brattleboro', Vt.....	4	199	344	88	25.58	44.22
Staunton, Va.....	4	207	467	201	43.04	97.10
Weston, W. Va.....	4	136	328	104	31.71	76.47
Pontiac, Mich.....	4	320	707	145	20.51	45.31
Madison, Wis.....	4	307	746	163	21.85	53.09
St. Peter, Minn.....	4	486	1,168	267	22.86	54.94
Augusta, Me.....	3	358	617	180	29.17	50.28
Totals and mean per cent.....	118	9860	18,756	5933	31.63	60.17

The total of admissions is 18,756; the total of recoveries, 5933; and the proportion of all recoveries on all admissions, 31.63 per cent. The largest per cent. of recoveries, 48.54, was at Fulton, Missouri, and the smallest, 15.83, at Danville, Pennsylvania. Of the remaining twenty-two institutions, the proportion was less than twenty-three per cent. at four; from twenty-five to thirty per cent. at five; from thirty to thirty-five per cent. at five; from thirty-five to forty per cent. at three; from forty to forty-five per cent. at three; and from forty-five to forty-six per cent. at two.

The whole number of *recent cases* admitted was 9860; the whole number of recoveries, as before stated, 5933; and the percentage of *all recoveries* upon the number of *recent cases* admitted, 60.17. Here, then, by setting aside and disregarding the 8896 cases of more than twelve months' duration, we have succeeded in raising the recoveries to a point above fifty per cent.

By the union into one group, so far as they are susceptible of such union, of the contents of these two tables, we obtain the following aggregate results.

In thirty-nine American hospitals, during a period of from three to six years each, making an aggregate of one hundred and eighty-six years of hospital work, the number of patients admitted was 33,318; the number of patients discharged recovered, 9713; and the proportion of recoveries, as compared with admissions, 29.15 per cent. In the factors producing this result it will be observed that all the cases of duplicate, triplicate, and manifold recoveries of one and the same person are included, and yet the recoveries do not rise to thirty per cent.

The whole number of *recent* cases admitted was 17,923; the total of recoveries of both recent and chronic cases, as already mentioned, 9713; and the proportion of *all recoveries*, as compared with the admissions of *recent cases*, 54.19 per cent. But be it not forgotten that this result is obtained by the sacrifice, or annulment, of 15,395 admissions; or, in other words, by calculating the proportion of recoveries upon a little more than one-half of the number of admissions.

RECOVERIES AT TWENTY AMERICAN HOSPITALS; THIRD TERM OF FIVE YEARS.—It will be remembered that the First Study, which was written in 1876, contains a list of twenty institutions for the insane, so tabulated with their statistics as to show the proportion of recoveries at each of two quinquennial periods,—the first of those periods being the second quinquennium of the existence of those hospitals, respectively, and the last period being the quinquennium terminating in either 1876 or one of the two immediately preceding years. The longest time wholly intervening between those two quinquennia was forty-four years, at the McLean Asylum, Massachusetts; the shortest, two years, at the Mendotal Hospital, Wisconsin; and the mean or average time, eighteen and a half years. But the true mean time, as applied to the gathering of the statistics,—that is, the time from the middle of the first quinquennium to the middle of the last,—was five years longer, or twenty-three and a half years.

The total of admissions in the first period was 14,516; the total of recoveries, 6689; and the proportion of recoveries on admissions, 46.08 per cent. The admissions of the second period were 24,383; the recoveries, 8354;

and the proportion of recoveries, 34.26 per cent., or a fall of 11.82 in that proportion. This diminution equals one-fourth, or, to be exact, 25.66 per cent., of the recoveries of the first period.

As eight years have elapsed since the close of the second period, it has appeared to me that some similar researches, at a still later date, might tend more fully to illustrate the subject of curability, and perhaps secondarily, or indirectly, the general character of the disease. Accordingly, I have collected the statistics of admissions and recoveries at the same twenty institutions during a third period of five years, the period terminating, at nineteen of them, in or with 1884, and at one, where the reports are biennial, in or with 1883. At two of the institutions, both of which report biennially, the duration of the period is six years. Those statistics, together with the results in each of the first two periods, are contained in the following table :

THE CURABILITY OF INSANITY.

TABLE VI.—RECOVERIES AT TWENTY AMERICAN HOSPITALS; THREE TERMS OF FIVE YEARS EACH.

Institution.	First Five Years.	Percent of Recoveries.	Second Five Years.	Percent of Recoveries.	Decrease of per cent of Recoveries.	Third Five Years.	Total Admitted.	Total Recovered.	Percent of Recoveries.	Per cent of Recoveries compared with that of Second Five Years.		Decrease of per cent of Recoveries from First Five Years.
										Decrease.	Increase.	
Augusta, Me.....	1846-50	48.55	1871-75	36.62	11.98	1880-84	1,008	296	29.36	7.26	...	19.19
Concord, N. H.....	1846-52	46.92	1872-76	32.97	18.95	1880-84	628	158	25.36	7.61	...	21.56
Brattleboro, Vt.....	1841-46	48.50	1871-76	30.43	18.07	1878-83	551	124	22.50	7.98	...	21.00
McLean, Mass.....	1828-27	40.69	1871-75	21.66	19.08	1880-84	421	123	29.22	...	7.66	11.47
Worcester, Mass.....	1883-43	48.69	1871-75	29.75	18.84	1880-84	1,319	264	20.01	9.74	...	28.68
Taunton, Mass.....	1853-63	48.46	1871-75	23.11	20.36	1880-84	1,318	296	22.46	.66	...	21.00
Butler Hospital.....	1854-58	39.78	1872-76	35.67	4.21	1880-84	635	194	30.55	5.02	...	9.28
Hartford Retreat.....	1828-33	57.40	1870-74	39.21	18.19	1880-84	453	162	35.76	8.45	...	21.64
Bloomington, N. Y...	1826-30	47.65	1871-75	32.55	15.00	1880-84	626	200	31.95	.60	...	16.60
Utica, N. Y.....	1848-52	43.17	1871-75	32.33	10.84	1880-84	2,020	610	30.20	2.13	...	12.97
Flabush, N. Y.....	1861-65	41.88	1871-75	33.11	8.77	1880-84	2,071	386	18.62	16.89	...	25.66
Trenton, N. J.....	1853-57	42.79	1872-76	31.82	11.47	1880-84	886	251	30.02	1.30	...	12.77
Pennsylvania Hospital	1846-50	51.10	1871-75	42.30	8.80	1880-84	978	328	33.71	8.69	...	17.39
Dixmont, Pa.....	1861-65	37.78	1871-75	30.01	7.77	1880-84	968	216	22.31	7.70	...	15.47
Catonsville, Md.....	1839-43	51.50	1871-75	40.83	10.76	1880-84	665	209	31.86	8.97	...	19.78
Newburg, Ohio.....	1860-64	46.63	1871-75	30.08	16.60	1880-84	1,147	439	38.27	...	8.24	8.36
Dayton, Ohio.....	1860-64	60.16	1870-74	45.25	14.91	1880-84	910	387	37.08	8.22	...	23.13
Indianapolis, Ind.....	1858-67	57.26	1871-76	52.48	4.78	1880-84	4,010	1678	41.84	10.64	...	15.42
Jacksonville, Ill.....	1855-60	46.53	1869-74	31.96	14.57	1879-84	1,486	395	26.68	5.38	...	19.95
Mendota, Wis.....	1865-69	33.82	1871-76	25.86	7.96	1880-84	1,021	280	27.42	...	1.56	6.40
Totals and mean per cent.....	46.08			34.26	11.82		28,052	6896	29.91	4.85		16.17

The aggregate admissions, in the course of this third period, is 23,052; the aggregate recoveries, 6896; and the proportion of recoveries, 29.91 per cent. of the admissions,—a result which demonstrates that the reported recoveries have continued to diminish, during the last eight years, in very nearly the same annual ratio as they had diminished between the first and the second period.

The following is a summary of the results of the whole investigation:

Recoveries in the first period, 46.08 per cent. of the admissions.

Recoveries in the second period, 34.26 per cent. of the admissions.

Recoveries in the third period, 29.91 per cent. of the admissions.

Decrease of recoveries from the first to the second period, 11.82 per cent. of the admissions.

Decrease of recoveries from the second to the third period, 4.35 per cent. of the admissions.

Total decrease of recoveries from the first to the third period, 16.17 per cent. of the admissions.

The decrease of recoveries from the first to the second period is 25.66 per cent. of the recoveries of the first period.

The decrease of recoveries from the second to the third period is 12.69 per cent. of the recoveries of the second period.

The total decrease from the recoveries of the first period is equal to 35.09 per cent. of the recoveries of the first period.

The numbers of the insane subjected to treatment

being hypothetically the same at the three periods, then, for each hundred that recovered in the first period, only seventy-four (74.34) recovered in the second period, and only sixty-five (64.91) recover now.

The proportion of recoveries between the last two periods, from 1879 to 1884, did not diminish at all of the twenty institutions. At three of them it increased. At the McLean Asylum this increase was 7.56 per cent. of the admissions; at the Newburg, Ohio, Hospital it was 8.24 per cent.; and at the Mendota, Wisconsin, Hospital, 1.56 per cent. But notwithstanding this augmentation, the actual decrease from the proportion recovered in the first period, at those three institutions, is still 11.47, 8.36, and 6.40 per cent., respectively.

The decrease from the second to the third period, and the total decrease from the first to the third period, at each of the seventeen other institutions, may be learned from the last two columns of the table. The decrease is more than one-half at the Worcester and the Flatbush Hospital; very nearly one-half at Brattleboro' and Taunton; and more than one-third at Augusta, Concord, Hartford, Pennsylvania Hospital, Dixmont, Catonsville, Dayton, and Jacksonville.

STATISTICS OF ONE YEAR AT FIFTY-EIGHT AMERICAN INSTITUTIONS.—For the purpose of ascertaining the extent to which the results of one year of the current work at American institutions would enlighten us upon the subject of curability, I have collected and herewith present, in Table VII., the statistics of fifty-eight of them, taken, in fifty-one instances, from the reports for 1884. Of seven of the hospitals the reports

are biennial, and consequently contain the results for two years each. In four instances the report from which these results were taken ended in 1884; in one instance in 1883, and in two in 1882.

I am well aware of the many influences, both favorable and unfavorable, which may, and often do, modify the number of recoveries, as well as of deaths, in public institutions, and which necessarily render the results of any one year unreliable, as a test or measure of the work of a series of years, at any individual hospital. But at a large number of institutions, on any given year, these influences would probably very nearly balance one another, and consequently the aggregate results would fairly represent the mean, or average, of the same group of institutions for a much greater length of time.

TABLE VII.—ONE YEAR AT FIFTY-EIGHT AMERICAN INSTITUTIONS.

INSTITUTION.	State.	Year.	Admitted.	Recov- ered.	Per cent. of Recov- eries.	Died.	Per cent. of Deaths.
Augusta.....	Me.....	1884	203	59	29.06	101	49.75
Concord.....	N. H.....	1884	141	18	12.77	24	17.02
Brattleboro'.....	Vt.....	1884	82	23	28.05	29	35.36
McLean.....	Mass.....	1884	113	34	30.09	17	15.04
Worcester.....	Mass.....	1884	252	53	21.03	57	22.62
Northampton.....	Mass.....	1884	136	25	18.38	25	18.38
Taunton.....	Mass.....	1884	283	85	30.04	65	22.97
Danvers.....	Mass.....	1884	530	96	18.11	101	19.06
Boston, City.....	Mass.....	1884	121	34	28.10	32	26.45
Butler.....	R. I.....	1884	106	46	43.40	13	12.26
Hartford Retreat.....	Ct.....	1884	97	37	38.14	18	18.56
Middletown.....	Ct.....	1884	271	72	26.57	80	29.52
Bloomington.....	N. Y.....	1884	136	55	40.44	27	19.85
Flatbush.....	N. Y.....	1884	479	47	9.81	101	21.09
Utica.....	N. Y.....	1884	372†	89	23.92	56	15.05
Buffalo.....	N. Y.....	1884	275	80	29.09	43	15.63
Trenton.....	N. J.....	1884	175	52	29.71	64	36.57
Morristown.....	N. J.....	1884	210	37	17.62	57	27.14
Penna. Hospital.....	Pa.....	1884	203	51	25.12	40	19.70
Harrisburg.....	Pa.....	1884	128	23	17.97	38	28.12
Dixmont.....	Pa.....	1884	189	28	14.81	69	36.50
Danville.....	Pa.....	1884	201	37	18.41	29	14.42
Norristown.....	Pa.....	1884	356	92	25.84	96	26.96
Warren.....	Pa.....	1884	203	36	17.73	46	22.66
Catonsville.....	Md.....	1884	95	29	30.53	30	31.57
Mount Hope.....	Md.....	1884	169	77	45.56	45	26.62
Washington.....	D. C.....	1884	347	79	22.77	67	19.30
Staunton.....	Va.....	1884	133	55	41.35	36	27.06
Richmond.....	Va.....	1884	119	97	81.51	61	51.26
Weston.....	W. Va.....	1884	176	74	42.05	39	22.15
Raleigh.....	N. C.....	1884	106	26	24.53	11	10.37
Goldsboro.....	N. C.....	1884	81	26	32.10	14	17.28
Morganton.....	N. C.....	1884	71	31	43.66	9	12.67
Columbia.....	S. C.....	1884	203	72	35.47	143	48.80
Austin.....	Texas.....	1884	254	66	25.98	41	16.14
Little Rock.....	Ark.....	1884	82	42	51.22	21	25.61
Nashville.....	Tenn.*.....	1882-84	222	67	30.18	62	27.93
Columbus.....	Ohio.....	1884	282	164	58.16	59	20.92
Newburg.....	Ohio.....	1884	220	87	39.55	37	16.81
Dayton.....	Ohio.....	1884	188	60	31.91	37	19.68
Athens.....	Ohio.....	1884	223	96	43.05	63	28.25
Longview.....	Ohio.....	1884	220	56	25.45	58	26.36
Indianapolis.....	Ind.....	1884	908	329	36.23	112	12.33
Pontiac.....	Mich.....	1884	192	62	32.29	29	15.10
Kalamazoo.....	Mich.....	1884	174	17	9.77	9	5.17
Jacksonville.....	Ill.....	1884	240	56	23.33	32	13.33
Elgin.....	Ill.....	1884	123	38	30.89	21	17.07
Anna.....	Ill.....	1884	220	67	30.45	33	15.00
Kankakee.....	Ill.....	1884	201	48	18.49	31	10.65
Mendota.....	Wis.....	1884	239	58	24.27	30	12.55
Oshkosh.....	Wis.....	1883-84	601	148	24.63	115	19.13
Mt. Pleasant.....	Iowa.....	1882-83	534	120	22.47	98	18.35
Independence.....	Iowa.....	1883	233	38	16.31	34	14.59
St. Peter.....	Minn.*.....	1883-84	595	143	24.03	82	13.78
Rochester.....	Minn.*.....	1883-84	299	55	18.39	43	14.38
Fulton.....	Mo.....	1881-82	364	175	48.08	113	31.04
St. Joseph.....	Mo.*.....	1881-82	316	110	34.81	49	15.51
Napa.....	Cal.....	1884	500	130	26.00	60	18.00
Totals and mean per cent.....	.....	.....	14,372	4007	27.88	2980	20.74

* Biennial.

† 15 cases "found not insane" are deducted.

The aggregate of patients admitted at these fifty-eight institutions, in the course of the time specified, is 14,372; the aggregate of recoveries, 4007; and the proportion of recoveries, calculated upon the admissions, 27.88 per cent., or a trifle more than one-fourth. The least relative number of recoveries, 9.77 per cent., was at Kalamazoo; and the largest, 81.51 per cent., at Richmond.

In the following schedule the hospitals are arranged in groups, according to the proportion of their recoveries, each group differing five per cent. from the one above or below it.

- Below 10 per cent., . Flatbush and Kalamazoo.
- From 10 to 15 per cent., Concord and Dixmont.
- From 15 to 20 per cent., Northampton, Danvers, Morristown, Harrisburg, Danville, Warren, Kankakee, Independence, and Rochester.
- From 20 to 25 per cent., Worcester, Utica, U. S. Government Hospital, Raleigh, Columbia, S. C., Jacksonville, Mendota, Oshkosh, Mt. Pleasant, and St. Peter.
- From 25 to 30 per cent., Augusta, Brattleboro', Boston, Middletown, Ct., Buffalo, Trenton, Pennsylvania Hospital, Norristown, Austin, Longview, and Napa.
- From 30 to 35 per cent., McLean, Taunton, Catonsville, Goldsboro', Nashville, Dayton, Pontiac, Elgin, Anna, and St. Joseph.
- From 35 to 40 per cent., Hartford Retreat, Newburg, and Indianapolis.
- From 40 to 45 per cent., Butler, Bloomingdale, Staunton, Weston, Morganton, and Athens.
- From 45 to 50 per cent., Mount Hope and Fulton.
- From 50 to 55 per cent., Little Rock.
- From 55 to 60 per cent., Columbus.
- Over 80 per cent., . Richmond.

If there be no mistake in the record from the Virginia Central Asylum, at Richmond, that institution, so far as my knowledge extends, has exceeded every other of its kind, not in America alone but upon the whole surface of the earth, in the proportion of its recoveries. Forty years ago, it was doing well to report the recovery of eighty per cent. of *recent* cases. At the present time, it is rare that even sixty per cent. are so reported, and the average in the United States, as we have just seen, is below forty per cent. But here we are confronted with a proportion of 81.51 per cent. of *recoveries of all the cases admitted!* The moral to be derived herefrom appears to be, that, if any person yet unborn be blessed with the pre-natal power of foreordination of his own physical organization, and desires to recover in case he be afflicted with insanity, he should elect to be born a negro.*

There is yet another useful moral to be derived from the case. At the Danvers Hospital, which, before it went into operation, had cost more than three thousand five hundred dollars for every patient for whom its accommodations were calculated, and more than two thousand five hundred dollars for each of the seven hundred patients who have been crowded into it, the per cent. of recoveries was 18.11. At the Richmond Hospital, which apparently could not have cost over one hundred dollars, and probably not more than fifty dollars per patient, the recoveries were equal to 81.51 per cent. The moral is so conspicuously obvious that it would be a work of supererogation to put it in print.

* The Virginia Central Asylum is for colored persons.

In Table VIII., the fifty-eight hospitals and statistics are grouped according to the States in which they are respectively situated.

TABLE VIII.—STATE GROUPS, ONE YEAR.

STATE.	No. of Hospitals.	Admissions.	Recoveries.	Per cent. of Recoveries.	Died.	Per cent. of Deaths.
Maine.....	1	203	59	29.06	101	49.75
New Hampshire.....	1	141	18	12.77	24	17.02
Vermont.....	1	82	23	28.05	29	35.36
Massachusetts.....	6	1,435	327	22.79	297	20.69
Rhode Island.....	1	106	46	43.40	13	12.26
Connecticut.....	2	368	109	29.62	98	26.63
New York.....	4	1,262	271	21.47	227	17.99
New Jersey.....	2	385	89	23.12	121	31.15
Pennsylvania.....	6	1,280	267	20.80	316	24.69
Maryland.....	2	264	106	40.15	75	28.41
District of Columbia.....	1	347	79	22.77	67	19.31
Virginia.....	2	252	152	60.31	97	38.49
West Virginia.....	1	176	74	42.05	39	22.15
North Carolina.....	3	258	83	32.17	34	13.18
South Carolina.....	1	293	72	24.57	143	48.80
Texas.....	1	254	66	25.98	41	16.14
Arkansas.....	1	82	42	51.22	21	25.61
Tennessee.....	1	222	67	30.18	62	27.93
Ohio.....	5	1,133	463	40.86	254	22.41
Michigan.....	2	366	79	21.58	38	10.38
Indiana.....	1	908	329	36.23	112	12.33
Illinois.....	4	874	209	23.91	117	13.38
Wisconsin.....	2	840	206	24.52	145	17.26
Iowa.....	2	767	158	20.60	132	17.21
Minnesota.....	2	894	198	22.14	125	13.98
Missouri.....	2	680	285	41.91	162	23.82
California.....	1	500	130	26.00	90	18.00
Totals and mean per cent.	58	14,372	4007	27.88	2980	20.74

The proportion of recoveries was the smallest in New Hampshire, and that proportion increased in the other States in the following order: Pennsylvania, Iowa, New York, Michigan, Minnesota, District of Columbia, Massachusetts, New Jersey, Illinois, Wisconsin, South Carolina, Texas, California, Vermont, Maine, Connec-

ticut, Tennessee, North Carolina, Indiana, Maryland, Ohio, Missouri, West Virginia, Rhode Island, Arkansas, and Virginia.

If the statistics of recoveries be arranged in accordance with the groups popularly called the Eastern, the Middle, the Southern, and the Western States, the results are as follows:—and to them are appended the percentage of deaths, calculated, like the recoveries, upon the number of patients admitted.

In the Eastern States the total of admissions was 2335; the total of recoveries, 582; and the proportion of recoveries, 24.92 per cent. The number of deaths was 562, and the proportion, 24.07 per cent. The number of recoveries exceeded that of deaths by only 20.

In the Middle States the number of admissions was 2927; the number of recoveries, 627; and the proportion of recoveries, 21.42 per cent. There were 664 deaths, equal to a percentage of 22.69. The deaths have a majority of 37 over the recoveries; and the proportion of both recoveries and deaths is less than in the Eastern States. It has been suggested, in one of the criticisms of a psychological periodical, that the small ratio of recoveries in Massachusetts is a consequence of the published writings of the superintendent of one of the hospitals in that State. As, according to these statistics, the proportion of recoveries is less in the Middle States than in Massachusetts, the proposition now is,—*Whose published writings were the cause of it?*

In the Southern States 1844 patients were admitted; and 632, or 34.27 per cent., recovered. The total of deaths was 496, or 26.90 per cent. The proportion of recoveries is nearly ten per cent. on the admissions in

excess of those of the Eastern States; and that of deaths nearly three per cent. The proportion of recoveries is considerably increased by the statistics of the Richmond Asylum. If those statistics be set aside, and the computation made upon the returns from the other Southern institutions, the results are: Admissions, 1725; recoveries, 535; per cent. of recoveries, 31.21. Deaths, 435; per cent. of deaths on admissions, 25.21.

In the Western States the admissions were 7266; the recoveries, 2166; and the proportion of them, 29.81 per cent. Of deaths there were 1258, or a proportion of 17.31 per cent., which is more than five per cent. of the admissions less than in either of the other sections.

Arranged in accordance with the *increasing* ratio of recoveries, that is, from lowest to highest, the sections stand as follows: Middle, Eastern, Western, Southern; and in accordance with the *decreasing* ratio, from highest to lowest, of deaths, as follows: Southern, Eastern, Middle, Western.

These results are derived from the work of but a single year, and hence are unreliable as an established formula. By the extension of the investigation over a sufficient series of years, something more surely indicative of a permanent truth might be obtained. When that shall have been done, speculation upon the causes of the differences will be more appropriate than it would be at the present time.

STATISTICS OF PENNSYLVANIA HOSPITALS.—The table to which attention is now requested includes statistics of the seven hospitals in Pennsylvania, during a period of five years each, with the exception of that at Warren, which is of but four years. At all of them the period ended in, or with, the year 1884.

TABLE IX.—PENNSYLVANIA HOSPITALS.

	Years.	Admitted.	Recoveries.	Per cent. of Recoveries.	Died.	Per cent. of Deaths.
Frankford	1880-84	196	58	29.59	39	19.90
Pennsylvania Hospital....	1880-84	973	328	33.74	147	15.11
Dixmont.....	1880-84	968	216	22.31	277	28.61
Harrisburg.....	1880-84	772	121	15.97	174	22.54
Danville.....	1880-84	720	114	15.83	118	16.39
Norristown.....	1880-84	1458	275	18.86	290	19.89
Warren	1881-84	847	92	10.86	113	13.34
Totals and mean per cent.	.....	5934	1204	20.29	1158	19.51

The whole number of cases admitted was 5934; the total of recoveries, 1204; and the proportion of recoveries, 20.29 per cent. But Norristown and Warren are both new hospitals, and in their first years received many transfers from other institutions. Hence they are unfairly represented. We will therefore permit the statistics of only the last two years at these institutions to enter into the computation, retaining, for the others, the full period of five years. Those statistics are as follows:

	Years.	Admitted.	Recovered.	Per cent. of Recoveries.	Died.	Per cent. of Deaths.
Norristown	1883-84	777	195	25.09	219	28.18
Warren.....	1883-84	388	70	18.04	80	20.62
Totals and mean per cent.	.....	4794	1102	22.98	1054	21.98

By a substitution of these figures for those contained in the next preceding table, it will be found that the whole number of admissions is 4794; the number of recoveries, 1102; and the proportion of recoveries, 22.98 per cent., or a gain of 2.69 per cent. on the admissions, by the change.

At the four State hospitals of Massachusetts, the proportion of recoveries in the three fiscal years ending in 1882, and the statistics of which form the basis of a section of Study Seventh, was 22.25 per cent. This is .73 of one per cent. less than that of the Pennsylvania hospitals, according to these statistics. But this difference is more than counterbalanced by the fact that the Massachusetts statistics relate to *persons* only, while those of Pennsylvania relate to *cases*. In the latter all duplicate, triplicate, and multiply recoveries are included, while in the former they are all *rejected*.

By the first of the two tables the deaths were 1158, and their proportion on the admissions, 19.51 per cent. By the last table they were 1054, and their proportion, 21.98 per cent., or an increase of 2.47 per cent. This increase is a natural result, as deaths are generally comparatively few in the first two or three years of a hospital's operations.

TESTIMONY OF THE DANVERS HOSPITAL.—The experience at the newest State institution in Massachusetts is both instructive and disappointingly interesting, in the light which it throws upon the curable, or rather the incurable, condition of a great mass of the insane of the present epoch in that State.

The Danvers hospital was opened for the reception of patients on the 18th of May, 1878; and, during the last four or five years, it has been directed by the highest grade of medical ability. It is, emphatically, one of those establishments upon which a flood of money has been poured, for the purpose of creating a curative institution as nearly perfect as possible under the light of existing knowledge. If abundance of pecuniary

means in construction, together with what was believed to be the highest embodied ideal of architectural arrangements, could cure insanity more rapidly than a less costly and more simple structure, that hospital, most assuredly, was prepared for a demonstration of the proposition. It was evident, in its earliest years, that great efforts were made to arrive at such a demonstration, and thus prove that the curative advantages of the institution were an adequate, or—since the value of reason restored is not to be measured by dollars and cents—*more* than adequate compensation for the excess of expenditure. The usual custom of a large transfer of chronic and incurable cases from older hospitals or asylums to the new one, was here omitted, and the supply of patients was derived chiefly from current commitments. By this means the proportion of recent cases was much higher than usual from the first; and as Boston and several other large centres of population—which usually furnish a larger ratio of recent cases than the rural districts—are within a comparatively short distance from it, that proportion was raised still higher.

The fiscal year of the State institutions terminated four and one-half months after the hospital was opened. During this period 305 patients were admitted; and 26, or 8.82 per cent., discharged recovered. In the course of the next—1878–79—fiscal year, 653 were admitted; and 115, or 17.61 per cent., discharged recovered. In 1879–80 the admissions were 581, and the discharge of recoveries 165, making the percentage of the latter 28.40. At this point the proportion of recoveries stopped upon its ascending scale, and took a retrograde direction. In 1880–81 the admissions were 497, the

recoveries discharged 124, and the percentage 24.95; in 1881-82, admissions 512, discharged recoveries 89, percentage 17.38; in 1882-83, admissions 488, discharged recoveries 80, percentage 16.39; and in 1883-84, admissions 530, discharged recoveries 96, and the percentage of the latter 18.11.

The whole number of admissions, during the six years and four and one-half months, was 3566; and that of discharged recoveries 695, or an equivalent of 19.49 per cent. In the first three full fiscal years, the admissions were 1731, the discharged recoveries 404, and the percentage of the latter 23.34; and in the last three fiscal years, admissions 1530, discharged recoveries 265, percentage of recoveries 17.32. In the first period of three years, the deaths were 240, or 13.86 per cent. of the admissions; and in the last period 285, or 18.63 per cent. of the admissions. In the first period the deaths were 240, a percentage of 59.4 on the recoveries; and in the last period they exceeded the recoveries by 20, the deaths being to the recoveries as 57 to 53.

The new formulæ for statistics in Massachusetts give the ability still further to illustrate the character of the recoveries,—an ability rendered by the reports of no other State in the Union. In the course of the five fiscal years ending September 30, 1884, 554 patients, or *cases*, were discharged recovered from the Danvers hospital; but 115 *persons*, who had been discharged recovered a total of 121 *times*, had returned to it. Within the last three years,—which are included in the foregoing years,—the discharged recoveries were 265; but, during the same time, 80 *persons*, representing 86 of those recoveries, were readmitted. So far as the

community is concerned, these recoveries offset, or cancel, the same number of the discharged recoveries, and the added recoveries in the population, instead of being 265, are 265 minus 86, or 179, a diminution of about one-third, and only 11.70 per cent. on the number of admissions during that period.

READMITTED RECOVERIES IN MASSACHUSETTS.—I now desire to call attention to some points in the statistical history of recoveries at the State hospitals of Massachusetts, during the two years since the original publication of Study Seventh. For this purpose a table is here introduced which shows, for the fiscal years 1882-83 and 1883-84 :

1st. The number of persons admitted who had previously been discharged recovered ;

2d. The number of times they had previously recovered ;

3d. The ratio of recoveries to persons ; and

4th. The number of persons discharged recovered during those two years, at each of the four hospitals aforesaid.

TABLE X.—TWO YEARS AT MASSACHUSETTS HOSPITALS.

HOSPITALS.	ADMISSIONS.			DISCHARGES.
	Persons Admitted who had previously been Discharged Recovered.	No. of times they had Recovered.	Ratio of Recoveries to Persons.	Persons Discharged Recovered.
Worcester.....	43	118	2.73	109
Taunton	64	147	2.29	145
Northampton.....	21	39	1.85	53
Danvers.....	49	54	1.1	176
Totals.....	177	358	2.02	483

The number of persons admitted who had previously been discharged recovered was 177; and they had been discharged recovered a total of 358 times. There were 181 more recoveries than persons. In other words, the number of recoveries was four more than twice as great as the number of persons. Each person had recovered, as a mean or average number, 2.02 times. Regarded, during the last two years, from a debt and credit point of view, those four institutions cancelled, by taking back from the general population, no less than 358 recoveries for which they had been credited. During the same time they discharged recovered 483 persons, which is only 125 more than the *recoveries* (not persons) which they had taken back.

SUMMARY.—A brief *résumé* of the most important results of the foregoing Studies, expressed in the percentages of recoveries, may be found convenient for reference.

1. *Cases of first attack ; duration less than three months.*

a. Earle's 8316 cases, at 23 British asylums. Recoveries 48.71 per cent.

b. Chapman's 38,283 cases, at 46 British asylums. Recoveries 48.72 per cent.

2. *Cases of first attack ; duration less than twelve months.*

a. Earle's 10,929 cases, at 23 British asylums. Recoveries 44.06 per cent.

b. Chapman's 50,409 cases, at 46 British asylums. Recoveries 43.79 per cent.

3. *Not first attack; duration less than twelve months.*

a. Earle's 4768 cases, at 23 British asylums. Recoveries 55.37 per cent.

b. Chapman's 19,574 cases, at 46 British asylums. Recoveries 53.61 per cent.

In neither of the three foregoing classes have we any American statistics, because our institutions, in the tabulation of their cases, make no discrimination which would render such a classification possible.

4. *All cases of duration less than twelve months.*

a. Earle's 15,697 cases, at 23 British asylums. Recoveries 47.49 per cent.

b. Chapman's 69,983 cases, at 46 British asylums. Recoveries 46.52 per cent.

c. Earle's 8063 cases, at 15 American institutions. Recoveries 38.59 per cent.

5. *All recoveries, calculated on all admissions.*

a. Chapman's 93,443 cases, at 46 British asylums. Recoveries 37.95 per cent.

b. Earle's 33,318 cases, at 39 [15 + 24] American institutions. Recoveries 29.15 per cent.

c. Earle's 23,052 cases; 3d period at 20 American institutions. Recoveries 29.91 per cent.

d. Earle's 14,372 cases; in one year at 58 American institutions. Recoveries 27.88 per cent.

It will be perceived that, so far as these statistics are an index, the recoveries in British asylums, both of recent cases and of all cases admitted, exceed the recov-

eries in the American institutions by between eight and nine per cent.

The most important general conclusions to be derived from the statistics included in this Study, are, first, that the old claim of curability in a very large majority of recent cases is not sustained, and that the failure to sustain it is more apparent and more striking than at any antecedent time; and, secondly, that the percentage of reported recoveries of all cases received at the hospitals in this country still continues to diminish.

It is believed that this diminution is, in part, to be attributed to the admission of a larger proportion of chronic cases, and of cases of greater degeneracy from their origin; in part, from the increasing—though, as there is good reason to believe, still far from universal—practice of not reporting, *as recoveries from insanity*, either mere restorations from a drunken debauch or forced temporary suspensions from habitual intoxication; and, in part, perhaps, from the adoption of a higher degree of improvement as the standard or criterion of recovery. It may be that there is still another cause of that diminution. Drs. Bucknill and Tuke, in their treatise upon insanity, mention what they call “cooked” statistics. It is possible that, in the United States, this class of published results is decreasing, and that the reported statistics are more generally given to the public in the spirit of a conscientious loyalty to scientific truth.

In conclusion, I would express the hope that the time is not far distant at which the American Association of Superintendents will so perfect its statistical system as to make a distinction between persons and cases, and

enable the reader to learn how many of the reported recoveries are first recoveries, and how many subsequent to the first. This improvement was made in the Massachusetts statistical tables, as already mentioned, in 1879; and in those of the British Medico-Psychological Association, in 1883. Surely the American Association ought not to lag far behind in the matter. It ought to have been the pioneer.

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